37175/B

2/6

3717s/B

59499

SUPPLEMENT

TO THE

Ornithological Dictionary,

OR

SYNOPSIS OF BRITISH BIRDS.

BY

GEORGE MONTAGU, Esq. F. L. S. & M. W. S.

Printed by S. WOOLMER, Exeter;

AND SOLD BY S. BAGSTER, 81, STRAND, T. AND A. ARCH, CORNHILL, AND THOMAS UNDERWOOD, 32, FLEET-STREET, LONDON; OF WHOM MAY BE HAD "TESTACEA BRITANNICA, OR SYNOPSIS OF BRITISH SHELLS, AND SUPPLEMENT,," WITH PLATES COLOURED OR PLAIN. ALSO, "THE SPORTSMAN'S DIRECTORY, OR TRACTATE ON GUNPOWDER," BY THE SAME AUTHOR.

1813.

WELLCOME
HISTORICAL
MEDICAL
LIBRARY

59499

INTRODUCTION.

SINCE the publication of the Ornithological Dictionary, we have continued our observations upon the characters and habits of British Birds, with the usual ardour and indefatigable research, the result of which has been a very considerable addition to our knowledge in that branch of natural history.

It might appear arrogant in us to enlarge upon the advantages science may have derived from the discoveries we have made, but we may venture to say, that a considerable portion of new and interesting matter will be found concerning the economy, habits, changes, and variations of species not before published; and that descriptions of many new and rare birds, elucidated by figures, will be observed to enrich the following pages.

There yet remains much to be done in order to complete the history of the birds of Great Britain, and which is daily swelling our notes; but as the additional matter has already increased upon our hands so much as to exceed the size of the original work, it was thought most advantageous to the public to give it in its present state, than to wait an

indefinite time, till it had arrived at a more considerable bulk.* By withholding individual information, general knowledge is suspended. Science is materially advanced by the promulgation of the sentiments of individuals, and poor indeed must be the resources of those from whom nothing is to be learned.

We have kept in view those points in Ornithology on which there seems to have been various opinions, in order that no opportunity might be suffered to escape, which could tend to clear up existing doubts. We have strictly attended to the changes in the plumage of birds incidental to age, to sex, and to season, and have taken the advantage of preserving alive, every species that could be obtained, where any material change was expected, or where the manners required more particular attention. By this means we have been able to prove, in several instances, that, what were before described as two or three distinct species, are actually only one, and in other cases we have indubitably ascertained, that, what had been considered as varieties of the same species, are perfectly distinct.

By the kind communications of numerous scientific friends from one extremity of the kingdom to the other, we trust this addition to the original work, accompanied with copious scientific and provincial synonyms, will form the most complete history of British Birds extant. In all the important parts of

* This contains about 472 Pages closely printed.

information

information, where ocular demonstration could not be obtained, we have, as usual, referred to the authority; and if we have by accident omitted to state the advantage we have derived from the assistance of any of our friends, we beg leave in this place to request that an apology and general acknowledgement may be accepted.

We are not aware that any thing has been omitted that could contribute towards the completion of the subject up to this date; but we by no means infer, that we have obtained all the knowledge individuals may possess with regard to particular species. If we have differed from other naturalists upon some intricate parts of native Ornithology, we shall be happy to stand corrected by those who may offer stronger evidences in support of a different opinion. Truth is the goal at which we aim; it is the essence of all human knowledge, and therefore, where facts could be produced, whether in opposition to the opinion of others, or at variance with any former opinion of our own, we have not scrupled to notice them, being all equally liable to err.

We know that some species have been placed in collections of British Birds, which are not to be found in this work; but without authentic information upon the subject, we are not justified in recording such upon the bare authority of a catalogue. We should be happy to obtain sufficient authority for giving such additions to the Fauna of Great Britain; at the same time caution is required in the admission

of subjects, without the fullest evidence of their having been killed at large in the kingdom. It is well known that several species of birds have been captured within these realms, that can have no claim to originality, nor even to migratory accident; such circumstances therefore must be attributed to their escape from confinement. Some of these we shall have occasion to mention in the progress of this work.

We have now only to solicit the same indulgence from the public which we formerly experienced, not doubting that the generous critic, and truly scientific physiologist, will look favourably on the errors occasioned by a slip of the pen, or by typographical delinquency. From those whose pen sips no other drink than gall, we have no more expectation of favour, than from the hand of an assassin continually imbued in blood; their trades are somewhat congenial, each stab in the dark, and are too frequently actuated by similar motives.

G. MONTAGU.

Knowle, June, 1813.

LIST

LIST OF PLATES.

CIRL BUNTING—Fem.
PIGMY CURLEW, or PIGMY SANDPIPER, in its winter plumage.
FERRUGINOUS, or NYROCA DUCK—Mas.
ASH-COLOURED FALCON—Mas.
LITTLE GALLINULE.
OLIVACEOUS GALLINULE.
EARED GREBE.
SCLAVONIAN GREBE.
LITTLE GULL—Immatured.
FRECKLED HERON.
LITTLE WHITE HERON.
AUSTRIAN PRATINCOLE.
GREEN SANDPIPER—Infantine plumage.
LITTLE SANDPIPER—Old and young.
WOOD, or LONG-LEGGED SANDPIPER.
BROWN SNIPE.
JADREKA SNIPE, or RED-GODWIT—Var.
RED-BREASTED SNIPE.
SPOTTED SNIPE.
GULL-BILLED TERN.
ROSEATE TERN.
SANDWICH TERN.
SOLITARY THRUSH.
TRACHEÆ of ANAS NYROCA and GLACIALIS, &c.

SUPPLEMENT

TO THE

Ornithological Dictionary.

A

AILSA-COCK. Vide Puffin.

ALK. Vide Auk-black-billed, and Razor-bill.

ALLAMOTTI. Vide Petrel-stormy.

ALLAN. Vide Gull-arctic.

ANNET. Vide Kittywake.

ASSILAG. Vide Petrel-stormy.

AUK-BLACK-BILLED. Alca Pica.

PROVINCIAL.

Alk or Oke.

In order to strengthen our former opinion concerning the distinction we conceive to exist between this and the Razor-bill, and as far as possible remove any discordance in the opinion of others, it will be proper to detail our more recent observations on the bird in question.

In the year 1802, on the 23rd of January, a variety of this bird was shot on the south coast of Devon. It weighed between sixteen and seventeen ounces: the furrow at the base of the bill was white: from the base of the upper mandible to the eye was an obscure line of white feathers: the forehead and crown black: sides of the head behind the

 eyes,

eyes, extending round the nape dingy-white: the upper part of the body and wings, as usual, black: sides of the chin speckled dusky: the feathers of the throat white, slightly tipped with dusky: neck, breast, and upper part of the belly slightly tipped with sooty-brown, giving the feathers a grey appearance, as if they had been soiled by some extraneous matter.

Another variety was shot on the 3rd of February. This weighed twenty ounces: the length sixteen inches: breadth twenty eight inches: the bill was furrowed, and had one white line across each mandible on both sides: inside of the mouth yellow: the irides hazel: the eleven first quills were all black, the rest tipped with white, about sixteen in number: from the bill to the eye an obscure line of speckled feathers: legs quite black, and in other respects like the last.

A third specimen, killed on the 16th of February, 1808, had its bill destitute of furrows, and not the smallest appearance of any white line between the bill and the eye.

There is nothing very remarkable in the trachea of this species; it is rather compressed, and the last ring at the divarication is very firm and bony.

From the preceeding description of the variety to which this bird is incident, we might be led to conclude, that all the intermediate stages might be found between this and the Razor-bill, that would reduce them to the same species; but that is not the case. The weight, and length of this bird are invariably much less, and the dark colour of the head and neck is never observed to possess that rusty tinge, the character of the Razor-bill in all seasons.

It will also be observed, that in the young of the Razor-bill, from the time it shews its nestling feathers, to the time of its autumnal migration, the whole head and upper part of the neck are dusky. But there is a stronger mark of distinction than even these, observable in their habits, for we

are

are informed by Fabricius, in his *Fauna Groenland*, that these birds are in greater plenty in that country, during the breeding season, than the Razor-bill, and that they disperse in winter.

If this is really the case, and there is no reason to doubt such good authority, it being impossible to be mistaken in the bird, the matter is clearly decided; for if the Black-billed Auk was really no other than the young Razor-bill immatured in plumage, and continuing so till after the breeding season of the second year, surely such imperfect birds would be equally as plentiful amongst our swarms of Razor-bills during summer as in Greenland: whereas, on the contrary, no such occurrence has been recorded, nor a specimen of the Black-billed Auk killed on the southern parts of the coast of England till the month of November, a period long after the others have departed. Besides we affirm, that out of many hundreds, perhaps thousands, we have shot of both the Razor-bill, and Foolish Guillemot, on various parts of the coast of England in the breeding season, neither the Black-billed Auk nor the Lesser Guillemot, ever occurred. Whatever therefore may be the little varieties of both these birds which bring them a shade nearer to those of which they have been by some naturalists considered as only the young, we should recollect, that though they have not been discovered to breed within the islands of Great Britain, yet they are described by northern physiologists as resorting to the arctic regions for that purpose, and disperse into lower latitudes during the icy months, when those seas are frozen. It is then that the northern parts of Britain receive abundance of them in company with the Lesser Guillemot, and a few spread over the southern parts.

Thus these birds supply the place of the Razor-bill, and Foolish Guillemot, who leave us to seek a more southern clime during the inclement season.

What separates the Rook and the Crow but their habits, for not a feather is different? It is their manners and note that detect them. How many are there that still seem to doubt the distinction between the Corvorant and Shag to be more than sexual? How are the Greater and Lesser Black-backed Gulls to be known but by habits, since naturalists give great scope to variety in size as well as in plumage, for although there is sufficient distinction in the colour of the bill and legs, yet these require perhaps the maturation of several years? the manners and habits therefore of such nearly allied birds, are, if they can be obtained, the best criterion of distinction. These and other similar species indigenous to our own country, within the means of our personal observation, teach us that habits are less erring than the usual marks of discrimination.

Suppose for instance the Black-billed Auk did actually put on the exact plumage, and other markings of the Razor-bill in the breeding season, (but which is not found to be the case) yet if the former should only visit us in the winter, and the latter only in the summer, who could doubt of their actual distinction, independent of their difference in size? As therefore we have such good authority for this species inhabiting Greenland in abundance in the summer months, and that they actually breed there, we must not consider the little variety sometimes observed in their feathers to be a step towards that maturity which would stamp the true character of the Razor-bill; for we know others of this class, as well as that of the Guillemot, vary considerably in plumage, and none more than the Black Guillemot, of which no less than seven or eight varieties are described, some of them so very different, as to have been considered distinct species.

Since then it has been ascertained that the Black-billed Auk breeds within the artic regions, and there, known by its different plumage, we may conclude it is at no season sufficiently

ciently like the Razor-bill to admit of their being confounded. And we can have no doubt but that the Lesser Guillemot is as distinct from the Common species, and breeds also in similar latitudes. We may therefore safely conclude, that those species which visit us in the winter migrate from the same northern regions, though each may have its limits or peculiar haunts; and like better known species may not be found to inhabit all situations alike.

We have been rather diffuse on this subject in order to clear up existing doubts by personal experience. But we shall have occasion to touch upon it again under the head of Guillemot-lesser, as well as under that of Auk Razor-billed.

AUK LITTLE, Alca alle.

Little black and white Diver, Greenland Dove, or Sea-Turtle. *Bewick B. Birds*, ii. fig. p. 172.

PROVINCIAL.

In Zetland is called Rochie. Rotch, or Ratch.

The birds of this species that visit Great Britain in the autumnal and winter months, most certainly come from the more northern parts of Europe, like the preceding, and very few, if any, breed with us except in the northern parts of Scotland They retire from the frozen shores of Greenland and Spitzbergen; but remain contented where they can obtain food from the liquid element, and consequently few migrate so far as the southern parts of England.

Muller and Fabricius are evidences of the northern habits of this bird, the latter speaks of their being plentiful, and states that they lay two eggs the size of those of a pigeon, white tinted with blue. A variety is mentioned that is totally white, and another with a red breast.

Since we last treated of this bird, three specimens have come under examination that were taken in the south of England in the winter; one on the 4th of December, in the year 1804, another

another on the 25th of November, 1805, and the third on the 17th of January, 1806. These were dissected in order to discover the sex, with a view to ascertain if there was any sexual difference in the plumage, it having been said that the throat of the male was black. The first of these proved to be a male, the description of which is as follows.

Length eight inches and a half. Upper part of the head black, taking in the eyes, (which are whitish); the sides of the head are white, which runs backward and forms a narrow band across the nape, sprinkled with dusky; but immediately above the eye is a small white spot: the whole under parts white; the chin and fore-part of the neck speckled dusky; the intermediate part or throat pure white: scapulars with four or five white streaks, or marks disposed in longitudinal lines: the thighs are mixed with a few black feathers: the upper parts of the plumage are of the usual black colour, and the secondary quills tipped with white: legs and feet dusky.

This was found dead near the coast in the South of Devon.

The second was found dead near Bridgewater, in Somersetshire, and differed in nothing from the former but in sex.

The third was taken alive in a pool of fresh water close to the estuary of Kingsbridge, in Devonshire, from which by reason of some defect it did not attempt to rise; and refusing all sustenance died the next day. In this there was no perceptable difference in plumage from the others, and consequently the sex was not attended to, or at least not noted.

The Little Auk has sometimes been found dead very remote from the sea. The Rev. Mr. Dalton, of Copgrove, near Knaresborough, in Yorkshire, assures us that both the *Alca alle*, and *Procellaria pelagica*, have been found near his house. Whether these were driven by storms, or attempted to cross the land from one sea to the other, is difficult to determine.

There can be no doubt that this species and perhaps some others

others of the tribe of Auks and Guillemots, appear in a different plumage in winter than what they assume in summer, particularly about the head. Those who have described this species from specimens taken in the breeding season, have informed us that the head and neck are black; whereas those taken in winter have the throat, under part of the neck, and cheeks invariably white. This opinion has been confirmed by a physiological friend, the Rev. Mr. Fleming, whose station in Zetland has enabled him to attend to the habits of some of our more northern birds. This gentleman assures us, that the Little Auk visits Zetland in the winter, and that then they all have the white about the head and neck; but that specimens in his possession, shot in Greenland in the summer, had those parts black, with a small white spot over the eye, which last is common at all seasons.

It is this periodical change of plumage that has caused so much controversy with respect to another species of this genus, as well as of some of the Guillemots, the white parts about the head and neck having been by some injudiciously considered as the criterion of infancy. But it is a most unnatural supposition that the young and the old birds should have a general separation in the autumn, because in the winter all that are noticed on our coasts possess more or less white on those parts. This circumstance alone should rather be adduced as a presumptive evidence that other birds of this kind have a periodical change of plumage twice in the year, since it is by no means a peculiar property. The Black-billed Auk, and Lesser Guillemot, (both of which are only found in this country during the winter when the others leave us, and which have similar markings about the head and neck, to those of the Little Auk,) probably have those parts black, on their return to the arctic regions to breed. But of this more is said in its proper place.

AUK-RAZOR-BILLED.

AUK-RAZOR-BILLED. Alca torda.

Razor-bill Orn. Dict.

Auk. Murre. Falk. Marrot. Scout. Bewick ii. t. p. 164.

PROVINCIAL.

In Zetland is called Hiogga. Sea-crow. Bawkie. Alk, or Oke. Falk.

Having in our own opinion adduced incontrovertable reasons, under the head of Auk-black-billed, to shew that it is perfectly distinct from this, we shall candidly innumerate our observations from personal experience.

It will be seen in the former part of the *Ornithological Dictionary*, that in the young of this species taken in the month of July, before they could fly, no difference was observable in plumage from the adult. It is true we have since had repeated ocular proofs of this fact, but we acknowledge to have had our astonishment excited by a young specimen brought to us alive on the fourth of August, 1802. This was larger than those we had usually obtained, (some of which had not any white from the bill to the eye) but it was still incapable of flying, the quills not having arrived at maturity.

The bill was destitute of furrows, but the line of white feathers from the bill to the eye was as conspicuous nearly as in adults: the upper part of the head and cheeks black; the throat speckled black and white; on the upper part of the neck before, and on the sides, several white feathers were observable amongst the black, and upon lifting up the feathers on those parts, a great many young white feathers were seen emerging through the skin.

Now by comparing the plumage of this bird with that of the young of inferior age and size, and both with the adult, and with the Black-billed Auk, we should find circumstances with

with respect to plumage not reconcileable but by considering them the same species, subject to variety, were it not for other incontrovertible facts to the contrary. To a collector only of these subjects it might appear, that a certain degree of gradation in plumage was apparent, (being ignorant of habits, weight, and measurement,) since in the most infant plumage the early young resemble the parent in the whole head and neck being black, and only differing in the want of the white line to the eye. At a further advanced age, (but before the quill feathers are perfected,) the white line from the bill to the eye is very conspicuous, and the white feathers on the throat, and neck, appearing in spots, it might be inferred that the cheeks would next become spotted, and lastly, that the black on these parts would wholly disappear, and thus unite the two into one species.

If indeed the union rested upon plumage alone, the appearance of the white line of feathers from the bill to the eye, would be unfavourable to the cause, because in no one instance have we observed an appearance of such a mark in the Black-billed Auk, till after the month of December, and very obscurely in the month of January. Besides in all the Foolish Guillemots taken in the winter, not the least difference is observable in their plumage from what it is in the summer months. But to that bird, whose habits are similar, we refer for further particulars.

It is indeed extremely difficult to account for some of the changes observed in the plumage of particular birds; but it certainly appears very unlikely, that the Razor-bill, who at first is destitute of such a mark, and afterwards in the month of August, before it could fly assumes this white mark, should again discharge it in October or November, to appear in the dress of the Black-billed Auk; and again acquire it in the month of March, when they first appear as Razor-bills on our rocky coasts. But even if this most sin-

gular and uncommon change of plumage (no less than four times within the space of eight or nine months) was admitted to be effected by the Razor-bill, the other species has been traced to its breeding place, and possessing habits of distinction: and it is well known, that until birds arrive at an adult state of plumage, they are incapable of breeding.

That many birds during the whole period of their lives change part of their plumage spring and autumn, is well known; but we do not recollect any instance where the young assume the most perfect summer plumage of the parent bird, to change it again for the winter dress, such as adult birds are frequently observed to effect, except in a few instances where the inhabitants of the snowy regions assimilate the colour of their plumage to their situation.

The instance of some of our well-known birds will serve to exemplify the fact. The Grey, and White Wagtails, both change a part of their plumage after the breeding season; the black feathers on the throat are replaced by white ones. The Golden Plover is destitute of the black on the fore part of the neck and breast, in the winter, which characterizes it in the breeding season; but neither the young of this, nor of either of the Wagtails, partake of these parts of the summer plumage of their parents, till they commence the task of preparing for a progeny of their own the succeeding summer. Thus the young of these, and many other species of birds, are at first clothed, similar to the parent birds in their autumnal change, and with them continue in one uniform plumage during the ensuing winter. This is a natural and common change; but similar changes are innumerable in those birds where there is a material sexual distinction in the plumage. In such cases it is an invariable rule, that the young of both sexes at first appear in the dress of their female parent, and that the male attire is in some the work of

of only a few months, while in others perhaps two, or more years may be required to perfect it.

There would be no difficulty in supposing that the old Razor-bills throw off the black feathers on the sides of the head, throat, and fore part of the neck, as well as the white feathers that constitute the line from the bill to the eye, on the approach of winter, it being nothing more extraordinary than we notice in the Wagtails, and a variety of other birds: but we cannot reconcile the circumstance of so unusual a change, as it is requisite the Razor-bill should make (as before stated) to connect it with the Black-billed Auk as one species.

In some of the birds who are confined to those regions, where, for one half the year at least, the surface of the earth is covered with boundless snow, an autumnal change in the plumage of both old and young takes place. Here we perceive the Ptarmigan invariably effect this curious, and we may add most providential change; for if the young of those birds at first assumed their snowy winter plumage, while yet the surface of the ground was not consonant with their colour, few would escape the piercing eye of the Falcon, or the Eagle, in the lofty and exposed situations they are found to inhabit. It has therefore been wisely ordered that these should at first appear like their parents in a mottled plumage, similar to the lichen-covered rocks they frequent, and continue in this dress till the approach of winter, when old and young become equally as white as the surrounding snow. These are changes incidental to the habits of particular species, and are facts well known to those who explore the secrets of nature: but we cannot imagine an unnatural change of plumage, for which we have no precedent, in order to connect two species, when other obstinate facts must infallibly keep them distinct.

We shall now dismiss this subject with a reference to the Auk-black-billed, and Guillemot-lesser and Foolish.

B.

BASS-COCK. Vide Puffin.

BAWKIE. Vide Auk-razor-bill.

BEE-EATER-COMMON. Merops apiaster.

Bee-eater. Shaw. Nat. Miscel. t. 162. Lath. Syn. Sup. ii. p. 148. No. 1. Br. Miscel. t. 69. M. & F.

This species is common in Egypt, where it is called *Melinoorghi* (Bees Enemy) and is eaten for food. At the Cape of Good Hope it is called Gnat-snapper; and is a guide to the Hottentots by directing them to the honey, which the bees store in the clefts of the rocks. It probably breeds in some parts of Spain and Portugal, as we are assured by an officer that it was not uncommon about Badajos, where he observed a considerable number flying about like swallows, but that they frequently pitched, and assembled together in trees in the gardens. This was in the spring of the year 1811, while the allied army was encamped before Badajos.

BITTER-BUM. Vide Bittern.

BITTERN. Ardea stellaris

Lath. Syn. Sup. ii. p. 300. No. 7. Bewick Br. Birds, 11. t. p. 47.

PROVINCIAL.

Bog-bumper. Bitter-bum. Bumble.

The occasion of the bellowing noise made by this bird, particularly in the breeding season, is supposed to be a loose membrane at the divarication of the *trachea*, capable of great

great distention, and which can be filled with air and exploded at pleasure. Doctor Latham informs us, that Mr. Lamb had observed this structure in several he dissected.

Whether this membrane has a direct communication with the *trachea*, independent of the lungs, is not noticed. If it is only an enlargement of the membrane, that in many birds is observed within the thorax, close to the clavicles, it is a part of that conformation which constitutes the air cells so peculiar to birds. The *aspira arteria* of those we have dissected had nothing very remarkable, and certainly had no communication with the interior of the body but through the lungs. If this membrane is a part of the *branchi* of the *trachea*, ours were not capable of any great extention; the interior part of the divarications is wholly membranous of a very fine texture; and the exterior sides are furnished with very slender cartilaginous bars, for they do not surround the *branchial* tubes of the *trachea*. This membranous structure of the part in question is by no means uncommon in other species.

In fact the propagation of sound, and different notes in animals, is at present very imperfectly understood; and the curious conformation observed in the *trachea* of some species of birds, rather puzzle than confirm any hypothesis upon the subject.

If we were to reason mechanically, we might conclude that the labyrinth at the lower extremity, or the enlargement in the middle of the *trachea* of some birds, especially the semi-ossious chambers in the Mergansers, and some species of Ducks, were intended as condensers to assist in the compression of the air for augmenting the sound; but experience informs us this is not the case, for some birds possessing a labyrinth have weak voices, exemplified in the Mallard or male of the common Duck. But as sound is produced by birds from the lower extremity of the *trachea*, and not from the

larynx, the condensation of air before that part cannot promote the force of the expulsion of it through the soniferous organ, but only serves to modulate the tone. As we have touched upon this subject in another place, it is unnecessary to enlarge upon it in this.

BITTERN-LITTLE. Ardea minuta.

Lath. Syn. Sup. ii. p. 301. No. 8. Bewick Br. Birds, 11. t. p. 51.

A female of this rare species was shot contiguous to the river Credey, in Devonshire, in the month of May, 1808. It was only wounded in the wing and was kept alive for two days; and it was observed to sit with its neck contracted like the common Heron, but with the bill pointing upwards. Upon dissection, about forty eggs were counted in the ovaries, some of which were so considerably enlarged, as to induce an opinion that a brood would have been produced in this country, especially as a male was afterwards shot not very distant, and had been previously seen near the same place. A third was also killed in the same neighbourhood during that summer.

Mr. Comyns who gave us the above information, has two of these birds in his collection.

It is found in some parts of Asia, particularly in Arabia; and if a little variety of plumage may be admitted, is an inhabitant of New Holland; this differs merely in having a few lengthened black spots down the fore part of the neck; such has been observed in the marshes about Port Jackson in December, and is called by the natives *Duralia*.

Mr. Fleming informs us, that one was shot at Sanda, in the Orknies, in the winter of 1805.

BLUE-CAP. Vide Titmouse-blue.

BOATSWAIN. Vide Gull-black-toed.

There

There appears to be a bird which is observed to breed on the Black-rock, on the coast of France, belonging either to the Gull, or Tern genus, which the British sailors have denominated Boatswain-bird. One of his Majesty's ships of war being stationed off that place, gave an opportunity for a party to land, and collect the eggs which were in great abundance. An officer preserved some of these eggs, which were given to us; and upon comparison they appear to be nearest allied to those of the Terns, but are larger, though not so large as the egg of the smallest species of Gull: nothing therefore can induce a belief that so rare a bird as the Black-toed Gull can be in such abundance on a neighbouring coast. It is however probable that the bird in question is either the Sandwich, or Gull-billed Tern.

BOG-BUMPER. Vide Bittern.
BONXIE. Vide Gull Skua.
BRAMBLING-GREATER. Vide Bunting-tawny.
BRAMBLING-LESSER. Vide Bunting-mountain.
BROAD-BILL. Vide Shoveler-blue-winged.
BUD-PICKER. Vide Finch-bul.
BULLS-EYE. Vide Purre.
BUMBLE. Vide Bittern.
BUNTING-BLACK-HEADED. Vide Bunting-reed.
BUNTING-CIRL. Emberiza Cirlus.
Lin. Trans. vii. p. 276. Lath. Syn. Sup. ii. p. 199.

Since the publication of the *Ornithological Dictionary*, we had the honor of laying before the Linnean Society, some further information respecting the natural history of this bird, which was published in the 7th vol. of their Transactions; to that work therefore we refer the curious reader, and shall only remark one or two circumstances for the information of those who may not have the means of benefiting by such reference.

Having

Having taken the young of this bird, it was found that insects were their most partial food; especially the Common Grasshopper. When they could peck, the smaller seeds were acceptable, and canary the favorite; of grain, wheat and barley were rejected, but oats were greedily devoured after they had dexterously, and quickly deprived them of the outer coat.

The monotonous song of the male was incessant, and so shrill and piercing, as to be offensive: it resembles so much the vociferous call-notes of the Lesser White-throat *Sylvia sylviella*, that it requires more than ordinary knowledge in the language of birds not to be deceived.

The female has only a simple plaintive note.

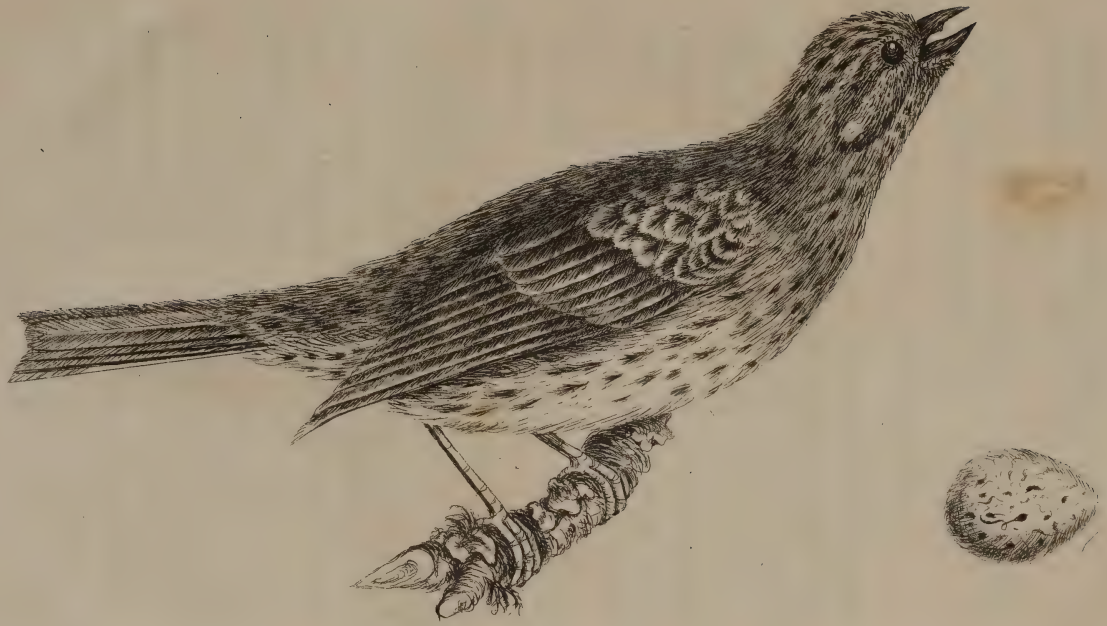
Since the paper on this subject was honored with a place in the Transactions before recited, we have made the following remarks, which serve to prove this bird not to be so extremely local as at first considered.

An ingenious observer of the native birds around Bridgewater, Mr. Anstice, (a gentleman to whom we are under many obligations for valuable information, and take this opportunity of public acknowledgement) assured us, that in the summer of 1803, he shot a male of this species near that town, which he knew to be that bird by the figure in the *Ornithological Dictionary;* and since that he has favoured us with several specimens from the same quarter.

In April, 1805, in a tour eastward, we observed a pair of Cirls in the high road between Bridgewater and Glastonbury: this is the utmost of their range east we have hitherto been able to ascertain.

To the westward it has been clearly traced to Falmouth, in Cornwall; a specimen was in the collection of Colonel George, of Penryn, which was shot near that place, as the Colonel informed us.

It



E.D. del.t et Sculp.

Girl Bunting Fem:

It has been also observed in some of the interior parts of Devon, especially about Ashburton.

BUNTING-COMMON. Emberiza miliaria.
Bewick Br. Birds, 1. t. p. 145.

Is observed in small flocks as far north as Zetland in the winter, but retires in the spring.

BUNTING-MOUNTAIN. Emberiza Montana

The doubts which have existed respecting the distinction between the Mountain, the Tawny, and the Snow Buntings, have induced us to pay as much attention to the subject as opportunity afforded. It is true the scarcity of these birds in the southern parts of England does not afford frequent opportunity of examination, but a sufficient number has been obtained to relieve our mind from any doubts on the subject; our observations therefore will be found under the respective species in question.

Two birds which appear to belong to this species were sent to us by Mr. Anstice, who shot them on the Mendip hills, in severe snowy weather. This gentleman remarked that he first noticed this bird about ten years before, and had twice since in similar weather observed large flocks which continued many days near the same place, alighting on the ground at short intervals of flight, in a hurried, and apparently distressed state, and generally bent their course from northwest to southeast.

These two birds differ greatly in plumage, but which appears to be merely a sexual distinction. The largest, which is considered the male, answers tolerably well to the description originally given, but as there are some particulars not noticed, it may be proper to more fully describe so obscure a species from the specimens before us,

The

The bill is yellow, with the point dusky: the forehead and part of the crown chesnut, gradually decreasing backwards, becoming only a tinge of that colour on the hind head: on the cheeks a paler patch of the same: the back part of the neck, scapulars, back, and rump, cinerious-grey mixed with dusky, particularly on the back, where the middle of the feathers possess more of the last colour: the upper tail-coverts are whitish, the largest immediately impending the tail dusky, broadly margined with grey: the whole under parts white, except a ferruginous bar on the upper part of the breast, very obscure in the middle: the six first quill feathers dusky, slightly edged with grey on the outer webs, and on the points of the three last; the seventh has part of the inner web white half way from the base, and a slight streak of the same down the outer web close to the shaft; the eighth like the last, but the outer web is white, with dusky spots; from the ninth to the twelfth all white on the inner web, and down the outer web close to the shaft, with a dusky margin; the two succeeding, all white; those next the body dusky-black, bordered with ferruginous: the smaller coverts are mottled dusky-black, and cinerious, the feathers being deeply margined with the latter; the last row of these next to the greater coverts is tipped with white, forming a narrow band across the wing: the coverts immediately impending the quills much the same, tinged with ferruginous: the tail somewhat forked, the six middle feathers dusky-black, margined with pale ferruginous-brown, the fourth on each side the same, with a white stripe down the inner web near the shaft; the two outer all white, except half the outer web towards the tip, which is dusky: legs and claws black, the hind claw slightly hooked and nearly double the length of any other.

The supposed female shot in company with the above is somewhat less, bill and legs the same. The forehead and crown

crown deep chesnut brown; cheeks the same but rather paler: the rest of the head above, back of the neck, scapulars, back, rump, and tail coverts ferruginous brown, more or less mottled with dusky, as the middle feathers are more or less of that colour, and of which the upper part of the back is most predominant, and least on the upper tail coverts: chin and throat dirty white: upper part of the breast crossed by a band of dull chesnut, above which the feathers are pale tipped with dusky, giving a speckled appearance to that part; the rest of the under parts sullied white: the wings are nearly similar in marking to those of the male, especially the smaller coverts, but the white in the quill feathers is less, not one of which is without some dusky toward their tip, and the brown parts incline to ferruginous; the spurious wing like that of the male, but not so full a black: the tail is dusky, with a ferruginous tinge on the lighter borders; the two outer feathers like those of the other sex, but the fourth from the centre wants the white on the inner web close to the shaft.

This species, which appears to be less frequent than the two others with which it is confounded, is rather less than the Tawny Bunting, and is essentially different in plumage from those now before us; and might at once be distinguished by the smaller coverts, which as well as the greater part of the wings, except the prime quills, are plain white in the Tawny; but if all other distinctions were wanting, the superior breadth of the tail feathers, as well as those of the wings, and the second feather of the wing being the longest in the Tawny, are fixed and determinate characters of distinction. In the Mountain Bunting the two first feathers of the wing are nearly of the same length.

That both these are perfectly distinct from the Snow Bunting cannot be doubted, if the colour of the bill alone was in general consulted, independent of the material difference

ference in markings; sometimes however the bill is yellowish at the base, as may be observed by the following description.

BUNTING-SNOW. Emberiza nivalis.

Thornton's Tour, p. 134. Bewick Br. Birds, 1. p. 152.

PROVINCIAL.

Snow-fowl. - Oat-fowl.

In order that a comparison may be made, and the species more easily identified, we have thought proper to give a fuller description of the Snow, the Tawny, and the Mounting Buntings, from recent specimens.

The bill, in the specimen now before us, is yellowish, with the tip black. The whole head, neck, upper part of the back, and all the under parts pure white, except a tinge of rust-colour on the forehead and back of the head; the rest of the back, scapulars, and tertials black, margined with rufous white: the upper tail coverts white: the *alula spuria* black; the prime quills black half way from their points, except on the inner webs of some, their base and the whole of the secondaries pure white; greater and smaller coverts quite up to the ridge of the wing white: the three outer feathers of the tail white, except a small spot of black on the exterior web of the first, and the points of the shafts of the two others; the rest are more or less black, margined, and tipped white: legs, toes, and claws black; the hind claw slightly hooked.

So very rarely does this bird migrate to the southern parts of England, that in the many years we have attended to the subject, no one instance has occurred, and yet if the bird has not been mistaken, there is reason for believing it may breed in the Scotish Highlands. Colonel Thornton in his sporting tour in that country, says, snow-flcaks were seen upon the summit

summit of a Ptarmigan mountain, August the 29th. Mr. Fleming says, it is common in Zetland in the winter only.

BUNTING-TAWNY Emberiza glacialis
Bewick Br. Birds, 1. t. p. 154.

PROVINCIAL.

Greater-Brambling.

This species does not by any means appear to be so rare in the Southern parts as either of the preceding; many have come under examination in a fresh state within these few years, and one alive, which we shall have occasion to speak of again; but first to give a more perfect description of a male now before us, which was shot on the coast of south Devon, not very distant from the Start, on the 20th of October, 1802.

Weight six drams and a quarter: length seven inches. Bill yellow, point black: the top of the head tawny, with a few dark chesnut spots: neck pale dull yellow, the lower part before becoming of a bright tawny: chin and throat white: back and scapulars black, the feathers deeply margined with tawny, giving them a spotted appearance: rump tawny: two or three of the upper tail coverts white: breast, and all beneath white: the eight first quills are white at their base, the black part (which is more or less slightly tipped and margined with white) occupies nearly the whole of the two or three first, and running oblique across the others, forms only a black tip to the eighth feather; from the eighth to the fourteenth are pure white, except a small dusky spot on the tips of the ninth and tenth; those close to the body, and their coverts black, deeply margined with tawny: the greater, and smaller coverts of those quills which are white, are of that colour, extending quite to the ridge of the wing:

wing: the greater coverts of the primaries, are like them, white, tipped with black: *alula spuria* black; the first and second quill feathers are the longest, and the latter rather exceeds the other: the three outer feathers of the tail on each side are white, except the tips of the outer webs of the two first, and the whole tip of the third, which are black, edged with yellowish white; the fourth has only a little white at the base; the others are black, margined at the tip with pale tawny: legs and claws black, the hind claw not much hooked, nor much longer than the middle one.

The secondary quill feathers, and all the coverts above them, up to the ridge of the wing being white, makes a very large and conspicuous bed of that colour down the wing.

Other male birds shot in succeeding years, both in Devonshire and Somersetshire, some of which were killed in the depth of winter, very nearly corresponded with the above, but in some instances more inclined to tawny.

The female was taken alive by a bird-catcher at Plymouth, in the winter of 1807, and was bought by Mr. Prideaux, of that place, who kept her in a cage for some months, and afterwards presented her to us. She was fed with mixed seeds, but prefered that of Canary, with which she became so excessively fat, that it was probably the occasion of fits, in one of which she died, after a confinement of seven or eight months.

She always continued shy to the last; by day seldom moving from the perch but to feed, but by candle light, was constantly running backwards and forwards at the bottom of the cage, in the manner of a Lark, but would occasionally hop.

She uttered a shrill note of alarm when frightened, but it was a mere monotonous chirp.

This sex is readily distinguished by having less tawny about the head, and particularly by having all the greater coverts of the

the wings black, tipped with white, and the lesser coverts black and grey mottled, as well as less white in the quill feathers.

BUSTARD GREAT. Otis Tarda.

Rural Sports, 11. t. p. 383. Shaw. Zool. Lect. t. 72. Bewick Br. Birds, 1. t. p. 326.

One of this species shot in Devonshire in the year 1804, and taken to Plymouth market, was bought by a Publican for a shilling; an evident proof that refined luxury had not found its way so far westward from the metropolis, since a poulterer in London would have demanded two or three guineas for it. But so rare a wanderer was not stamped with its real value, where it was unknown, and the Landlord perhaps considering it fit for a secondary table, fairly speculated upon the cost of a dish that perhaps did not exceed one half-penny in the pound, and had it dressed for the dinner of some riders. These itinerant gentlemen being as ignorant as the natives, of the prize set before them, and perceiving upon dissection, the difference in the colour of the pectoral muscle from the other part of the breast (a circumstance not unusual, especially in the Grous kind) voted it improper food, and ordered it from table.

Some neighbouring gentlemen happening to sup at the inn the evening after, and hearing of the circumstance, desired they might be introduced to this princely bird, and partook of it cold, at this repast.

The above story was related to us by a gentleman of property and strict veracity, residing in the county.

Could this bird have been likened to any known species of game, for which there is so much demand, it might have proved a treasure to the captor; for the Lesser Bustard was offered for a very reduced price in the same market, not many years since, when some person pronounced it a Heath fowl

fowl, (a bird inhabiting some parts of Devon) and the price instantly rose to five shillings, which a friend who afterwards sent it to us, did not hesitate to give.

The Great Bustard has decreased so rapidly within these twenty years, that in a few years more not a vestige of them will remain in these realms. The shepherds with whom we have conversed lately, declare they have not seen one in their most favourite haunts, upon the extensive downs of Wiltshire, for the last two or three years, where we have often contemplated this noble bird with so much pleasure, and regarded them as an object well worth every attempt to cultivate in their native plains; for all the artful means tried to keep and domesticate them, so as to procure increase, have proved abortive. The length of their days is so reduced in that state, that few have exceeded two or three years, and have never shewn any inclination to breed.

BUSTARD-LITTLE. Otis Tetrax.

Nat. Miscel. xiv. t. 573. fem. Bewick Br. Birds, 1. t. p. 330.

Bewick makes mention of two specimens he had seen, that were shot in England, both females; one of which was taken on the border of Newmarket heath.

Another was shot near Romsey, in January, 1809, as we are informed by Doctor Latham, which was also a female.

In the middle of October, 1810, we observed one of these birds in a turnip field, in Devonshire, but it would not suffer us to approach near enough to shoot it, but it appeared in feminine plumage.

To these another female may be added, that is now in our museum. This was shot near Torrington in Devonshire, in December 1804, and was taken to Plymouth market, where it was sold for a female Black Grous, but fortunately fell into the hands of Mr. Prideaux, a gentleman who knowing it to be

be a rarity, snatched it from the all-devouring jaw of the epicure, for the purpose of placing it in its present situation.

As this is the only fresh specimen that ever came under our examination, a more particular description than what we were before enabled to give, may not be unacceptable.

The weight was twenty-five ounces: length sixteen inches and a half: breadth thirty-five.

Bill dusky brown: irides pale crimson: behind the eye a space bare of feathers: upper part of the head, hind neck, and whole upper parts, including the smaller coverts of the wings, are a mixture of pale ferruginous and black, disposed on each feather in lines and bars, in a most elegant manner: the row of coverts immediately impending the tail, white, with transverse black bars, the tips white; on the fore part of the neck the markings are more distinct, and the ferruginous occupies the middle of each feather; but towards the breast the markings change, and the black becomes undulated in distinct transverse lines on that part, continuing the same down the sides: the cheeks streaked with dusky: the throat is plain yellowish white: belly, vent, and thighs, white: sides of the under tail coverts barred with black: the four first quill feathers dusky half way from their tips, their base white: the six next white, except a large black spot at their tips, and a very small black mark on their shafts; the eleven following, white, with two or three black bars on each, most on the outer webs, and a small spot of the same at their tips: the tertials next to the body are similar in colour and markings to the back and scapulars, and nearly as long as the prime quills: the coverts of the secondary quills, white, barred with black: the tail consists of eighteen white feathers closely spotted with irregular small markings of black, with three conspicuous bars of the same; the light part of the four middle feathers inclines to ferruginous; at the base of all the white predominates: legs yellowish-brown and scaly;

the toes dusky-brown, connected together at the base by a small membrane; claws of the same colour. Along the back of the neck is a considerable space bare of feathers, but covered with down: on the breast the down at the base of the feathers is of a pale rose-colour.

This appeared to be a young bird, yet the ovaries were sufficiently conspicuous. There was nothing remarkable in the *trachea*, but the stomach (which had nothing of the nature of that of granivorous birds) was of a most unusual size, distended by various herbs, reaching from the gullet to the vent. Nothing but vegetables were observed, and of that a great variety, but particularly some species of trefoil. From this conformation of the stomach, we may conclude the bird to be wholly graminivorous; and in all probability the Great Bustard is precisely of the same nature.

The extraordinary size, and membranaceous texture of the stomach of this bird, is by no means favourable to the opinion advanced by an able comparative anatomist, in the second part of the *Philosophical Transactions for* 1810.

The author of the paper alluded to, has considered grass as the substance of all others that are employed for food, which requires the most preparation; and that according to the usual economy of nature, the ruminating animals which live principally on this substance, have organs adapted for the purpose of extracting the utmost possible nourishment from their food.

It is not our intention in this place, to enter into a discussion upon the organs of digestion in quadrupedes, but as we find there are some animals who are equally graminivorous with those who have the powers of ruminating, and whose stomach is extremely different; it requires to be ascertained, whether the stomach alone in ruminant animals, affords the means of extracting a superior portion of nourishment; or whether by a second mastication, the food is not better prepared

pared by its extreme comminution, to yield more expeditiously its nutrimentous contents than can be effected in the stomach of a horse, who has not the power of grinding his food a second time, the mastication of which is imperfectly performed, and coarsely submitted to the organs of digestion. Comminution of graminous food appears to be more essential in the opinion of this author, than any other powers nature has assigned for the purpose of digestion. With this view he seems to have examined the gizzards of such birds as are in the habit of grazing, in order to compare them with the same organ belonging to birds that are not considered as graminivorous; and we are told a marked distinction appeared between the goose and the turkey. We are informed the stomach of the turkey is altogether less muscular; its parts appear to possess less motion on each other, and do not come in contact; whereas in the goose the muscular fasciculi are peculiarly powerful, and the opposite sides move on each other, and rub down the food, very much like the manner in which this is done by the grinding teeth of ruminating animals.

With all due deference to the professional abilities of this writer, we must take leave to remark, that the comparison between the two birds in question is by no means conclusive, since they are both equally graminivorous, and granivorous, for the turkey by nature in its native transatlantic wilds subsists entirely on plants for three fourths of the year, and in a domestic state requires no other food.

It is true both the turkey and the goose greedily devour grain, and various other seeds occasionally, and appear to prefer it; and consequently, we may reasonably conclude, nature has given them both muscular gizzards, not for the purpose of grinding herbaceous food, but to triturate and comminute substances that may occasionally offer themselves, and which must otherwise cause a stoppage, or pass off un-

digested, as corn is commonly observed to do with horses, if it is not broken by the grinding teeth.

Had this anatomical writer examined the stomach of a truly graminivorous bird, we have no doubt he would not have considered that a superior muscular strength in the stomach was necessary for the comminution of herbaceous food, since (as we have noticed) the stomach of the Little Bustard appears to be divested of sufficient muscular action to comminute its food by compression. From the structure of the stomach of this bird, which is one of the very few that is truly graminivorous, we are naturally led to conclude, that the leaves and tenderer parts of plants are readily macerated, and prepared in the stomach by the conjoint action of the gastric juice, and the animal heat, more than by friction. The vast distention of the stomach in this bird, charged with such a large quantity of herbaceous food, rendered it impossible for the coats of the stomach to come sufficiently near to perform attrition; nor were there any gravel stones perceived, to assist such action. May we not therefore fairly infer, that grass and other herbs are, under certain circumstances, rendered easy of digestion, and yield their utmost possible nutriment without trituration in the stomach. The stomach of the Little Bustard, is not furnished with that strong cartilaginous substance, apparent in more omnivorous birds, and in particular, those who occasionally feed on grain and other hard substances that require breaking, and comminuting by strong muscular pressure and friction; but is more analagous to that of carnivorous birds, except that it is vastly superior in size. The stomach of the Cock of the Wood, or Wood Grous, *Tetrao urogallus*, and other species of the same genus we have examined, are very similar to that of the Turkey, and these feed principally on the tops of heath, birch, pine, and other green vegetables; but as these

are

are not tender, but of a ligneous quality, their stomachs are always found to contain a large portion of gravel, or grit, in order to facilitate the comminution of their food.

Why grass and other green vegetables should not be dissolved or comminuted in the stomach of carnivorous birds and quadrupedes, as well as in graminivorous, is a matter worthy the attention of the enlightened anatomist we have here refered to, since we find that the stomach of those birds which are truly graminivorous, have no more muscular power than that of a carnivorous or piscivorous bird.

What then causes the digestive faculties in the former to be so much more powerful (for these can digest flesh and even bone to a certain degree as well as grass) than those of the latter, who are incapable of decomposing such, although the dissolution of the hardest bones are affected by the solvent powers of the fluid secretion in the stomach of some? This is daily exemplified in the dog, who either ejects the grass, medicinally taken into the stomach, or passes it whole and unaltered through the intestinal canal, and yet converts into nourishment the most solid bone.

We have been led into this partial discussion, in order to promote a further enquiry into so curious a subject, and because we think the physiological writer alluded to, has built his hypothesis upon the comparison of improper subjects. In another place, we shall probably have occasion to enlarge upon this topic, and therefore, with these hints, we shall take our leave of it for the present.

The Little Bustard is said to be found as far north as Lapland.—(*Acerbi's Travels*).

BUSTARD-THICK-KNEED, otis œdicnemus.

Great Plover, Bewick, Br. Birds 1. t. p. 333.

We do not recollect an instance of this bird having been observed in the northern parts of the kingdom; and the same

is noticed by Mr. Bewick, who published his works at Newcastle. Neither is it frequent so far west as Devonshire, and still more rare in Cornwall; and is not we believe found to breed in either of those counties, but only occasionally observed from some accidental cause.

No instance to our knowledge is recorded of its wintering with us, but in the beginning of February 1807, one of these birds was shot in the most southern part of Devon, which we saw. It was a female, and probably the mate of one that had been shot near the same place, about a fortnight before.

In this unusually mild winter, these birds had found their way to the most southern point of land in the kingdom (the Lizzard excepted) the start promontory, where they were contented with a sufficient supply of their usual food, without crossing the channel to a warmer climate. This and many other instances of the genial warmth of that part of Devon may be produced, especially the partial residence of the Lesser Pettychaps and the Ruff, which will be particularly noticed in their places.

CALAW or CALOO. Vide Duck Long-tailed.

CHACK, CHECK, CHACKER, or CHACK-BIRD. Vide Wheatear.

CHALDER or CHALDRICK. Vide Oyster-catcher.

CHATTERER-BOHEMIAN, Ampelis garrulus, Nat. Miscel, t. 135.

This species has occurred as far west as Devonshire, one having been shot in the park of Lord Boringdon, at Saltram.

CHAUK. Vide Crow, red-legged.

CHERRY-SUCKER. Vide Flycatcher-spotted.

CHICKER. Vide Wheatear.

CHIFF-CHAFF, or CHIP-CHOP. Vide Pettychaps-lesser.

COALLY-HOOD. Vide Finch-bul.

COCKANDY. Vide Puffin.

COOT-COMMON. Fulica atra.

Lath. Syn. Sup. ii. p. 328.

The Coot is said to breed in great abundance in the isle of Sheppey, where the inhabitants will not suffer the eggs to be taken, as the birds are a great article of food; and are skinned previous to dressing.

These birds place their nest amongst the flags upon the surface of the water, but by heaping a large quantity of the same materials together, raise the fabric sufficiently above water to keep the eggs dry. In this buoyant state, a sudden flood attended by a gale of wind, has been known to drive them from their moorings, and we are assured by an intelligent observer of nature, that he has seen a nest floated from one side of a large piece of water to the other, with the bird upon it.

CORMORANT-GREAT-BLACK. Vide Corvorant.

CORMORANT-GREEN. Vide Corvorant and Shag.

CORVORANT. Pelicanus Corbo.

Corvorant. Bewick, Br. Birds, 11. t. p. 381.

Crested Corvorant. Id, 11. t. p. 388.

PROVINCIAL.

Great-Black-Corvorant. Cole-Goose. Skart. Green-Cormorant. Brougie. Norie.

Different opinions still exist amongst naturalists, with respect to the crested Corvorant and crested Shag; some maintaining the opinion, that they are distinct from the common species, while others consider them as only varieties of those two species. We are, however, enabled to clear up this matter beyond all dispute, proving by incontrovertible facts, that

that the crested Corvorant is no other than a variety of the common species.

One of these birds was shot in the river Avon, in Devonshire, and presented to us by a valuable friend, and scientific ornithologist, (the Rev. Mr. Vaughan), on the 27th of February, 1805.

The length of this bird (now in our museum) is three feet: the weight six pounds one ounce: and upon dissection, proved to be a female, made particularly evident by four of the ova being considerably enlarged.

In the beginning of April, in the year 1808, another of these birds was taken alive, near Bridgewater, and sent to us by our friend Mr. Anstice, of that place.

These two birds were so exactly similar, that the following description is equally applicable.

The bill about four inches and a quarter in length from the gape, dusky above, the base of the under mandible whitish; irides green: the bare skin under the bill and chin dusky speckled with yellow: under the eye a bare sub-triangular spot of bright yellow, taking in the bill at the corner of the mouth, and finishing the angle on the lower mandible: from the bill to the eye the skin is dusky black: the crown, and back of the head and neck, fine glossy bluish-black, changeable to greenish, or violet, and mixed with slender white feathers half way down the neck; from the hind-head downwards for three or four inches, the feathers are considerably elongated, and form a crest destitute of any white feathers: behind the eye commences a white band, nearly an inch in breadth, that surrounds the throat, immediately behind the bare skin; behind this again is another narrower band of changeable bluish-black, that separates the hoary part of the neck, (constituted by the mixed black and white feathers) from the pure white band: the back, scapulars, coverts of the

the wings, and secondary quills, bronze or changeable greenish-brown, each feather bordered with glossy blue-black: the under parts of the body bluish black, changeable to green: on each thigh a large patch of pure white.

The sex of the specimen sent to us alive has not been ascertained, as it is now, in December, 1809, in perfect health, but has completely been divested of all the marks that characterized the crested Corvorant; being destitute of the crest, the white band on the throat, the hoary neck, and the white on the thighs. In fact, is completely metamorphosed into what we always suspected, the common Corvorant.

It continued its first plumage till the regular moulting season, the autumn of 1808, when it gradually disappeared, and the feathers replaced by the usual plain ones: and the second moulting now completely effected is similar in every respect to the last. From this fortunate capture therefore we are enabled to decide so long contested a dispute; and from which we may fairly infer, that the two supposed species of Shags are mere accidental varieties.

The possession of this bird has given us much of its history we were previously unacquainted with. It is extremely docile, and of a grateful disposition, without the smallest tincture of a savage or vindictive spirit, and by no means possessing the bad qualities a celebrated writer would induce us to believe, by making it personify Satan.

The bird in question was surprised by a Newfoundland dog, belonging to a fisherman, under the banks of a rivulet that ran into the Bristol channel; it was taken home, and not being in the accustomed plumage, was reported to be a curious and unknown species. As soon as Mr. Anstice heard of it, he went to see the bird, and found that in the small space of time it had been made captive (about a week), it was perfectly familiarized, and making one in the family circle round the fire, suffering the caresses of the children,

who

who were very unwilling to part with it. That mode, however, by which all earthly matters are obtained, and by which kingdoms are lost and gained, succeeded, and it was conveyed to us by the coach, being placed in a basket. As soon as it arrived and was liberated, it followed the servant who released it, and was offered every sort of food at hand, all of which was equally refused; not even raw flesh was acceptable, and no fish could then be procured to satisfy its hunger, (having been twenty-four hours on its journey), in consequence we crammed it with flesh, which was taken very reluctantly; but even with this rough handling, its formidable bill was not made use of offensively. After feeding, it was placed on a stool, in an adjoining room to the library, where it sat perfectly contented, and adjusted its disconcerted plumage. Observing it so perfectly reconciled to its new abode, and having retired to the library, leaving both doors open, with intention of returning, we were astonished in a few minutes, to see the stranger walk boldly into the room, while in conversation with a friend, and coming towards us with the greatest confidence and familiarity, joined us at the fire-side, where it reassumed the task of pluming and dressing its feathers. From hence we removed this bird to an aquatic menagerie, to which it was carried without offering the least offensive resistence, but the sight of water made it restless, and when liberated, it instantly plunged in and dived incessantly for a considerable time, in hopes of prey; and after searching every part of the pond, without obtaining a single fish, it appeared to be convinced there were none, and never made any other attempt for three days, during the whole of which time, it was crammed with flesh, not being able to procure any fish.

It is almost incredible to see with what dexterity this bird dives and seizes its prey; knowing its own powers under water, if a fish is thrown in at a great distance, it frequently dives immediately, and pursues its course under water in the line,

line, to the spot it was observed to fall, with vast celerity, and and if the water is clear, takes the fish with certainty, and frequently before it falls to the bottom.

If the fish happens to be of the flat kind, it is invariably turned in the bill, so as to reverse its natural position, by which means only could such be got within the bill. In this case the delatable skin under the bill is of great use, but it by no means deserves the appellation of a pouch, not being capable of more distention than any part of the *æsophagus*; nor can it be used as a reservoir for provision, either for the bird's own use, or for the purpose of carrying food to its young.

The quantity of fish this bird will swallow at a meal is astonishing; three or four pounds twice a day are readily devoured, the digestion being excessively rapid. If by accident a large fish sticks in the gullet, it has the power of inflating that part to its utmost, and while in that state, the head and neck are shaken violently, in order to promote its passage. This is a property we never observed in any other bird, but is probably common to the rest of the tribe, or such as are destitute of nasal apertures. That all birds have a communication between their lungs, and the cavity of their body surrounding the *viscera*, more or less, is well known; but as there is no passage into the *æsophagus* but by the mouth, to effect this inflation, a violent compression of the body becomes necessary at the same time the bill is closed, and the air is forced back into the mouth and pressed into the gullet.

It is observable in the act of fishing, this bird always carries the head under water, in order that it may discover its prey at a greater distance, and with more certainty than could be effected by keeping its eyes above the surface, which is agitated by the air, and rendered unfit for visional purposes.

All

All fishes are invariably turned in the bill, so as to present the head foremost; and when an Eel (the most favourite food) is captured, and not seized favourable for gorging, and the resistance of such slippery prey renders it impossible to be turned in the bill, then the fish is thrown up to some distance, and most dexterously re-caught in a more favourable part, and instantly swallowed.

Another action seems also peculiar to this bird, and perhaps its congeners. That is a most violent beating of the water with its wings, without moving from the spot; and each beating is succeeded by a shake of the whole body, and ruffling of all the feathers, at the same time covering itself with the water. This singular action is repeated ten or twenty times with small intervals of rest; and afterwards it repairs to a tump, or some elevated place on shore, and spreads or flaps its wings till they are dry.

It lives in perfect harmony with a Whistling Swan, a Bernacle Goose, various sorts of Ducks, and other occasional birds, but if it perceives a Gull with a piece of fish, it instantly gives chace; if, however, the Gull has time to swallow it, no resentment is offered, the sight of it created the desire of possession, and that desire ceases with its disappearance.

If it gets out it never attempts to ramble, but walking direct to the house, enters the first open door without deference to any one, regardless even of a dog, and in fact is troublesomely tame.

There was a specimen of this variety in the late *Leverian Museum*, and Mr. Bewick has described and figured another from the collection of Mr. Tunstall, which he refers to the Crested Shag of the *British Zoology*, but that cannot be, since Mr. Pennant's bird is said to be less than the common Shag, and to have only twelve feathers in the tail, whereas this bird has fourteen.

Muller

Muller in his *Zoologiæ Danicæ Prodromus* has placed this and some of its congeners amongst the *Procellaria*, or Petrels; but from those it is so essentially different in conformation, as well as habits, as to render them perfectly incongruous. We think, however, that the Corvorant and Shag, and their strict affinities, should constitute a distinct genus from the Gannet and the true Pelicans, being as different in many essentials of structure, as in their habits. But for further particulars we refer to the article Gannet.

CRANE. Ardea Grus. Bewick Br. Birds, ii. t. p. 29.

A few years since, a small flock appeared in the harvest time, at Tingwall, in Zetland, one of which was shot. They were observed to feed on corn, a very unusual food for such birds.

CRES-HAWK. Vide Kestrel.

CROW-CARRION. Corvus corone.

Shaw. Zool. vii. p. 345. Lath. Syn. Sup. ii. p. 108.

PROVINCIAL.

Minden-Crow. Black-nebbed-Crow.

It has been said, that a pair of these birds made their nest on the vane, upon the top of the Exchange, at Newcastle, and of course, was continually turning as the wind directed. Mr. Bewick states it to be Rooks that made their nest for many years in that singular situation. In many animals we perceive a strong instinctive impulse that nearly approaches to reason; if it cannot be called reflection, it is a compound instinct, not very remote from mental operation. When we observe an animal eat, we consider it as a simple mechanical action, originating from momentary impulse, occasioned by sensations of hunger, a stimulus of the organs of repletion to support

support vitality, the first law of all animate beings. If after an animal has satisfied its hunger, it seeks a secure place wherein to deposit the remainder for a future demand, it seems to be the effect of some impression nearly allied to reflection, and differing from the former, inasmuch as it bespeaks a forethought, an impression arising from some motive power, distinct from that occasioned by the stimulus of immediate want. But what shall we call that which directs such animals to a degree of discrimination, in the choice of a place for the better security of their intended future repast? surely, it is a step beyond instinct, and must be considered as a limited reflection, because no momentary impulse exists.

We were naturally led into this train of reflection, by observing two Crows by the sea shore, busy in removing some small fish (the refuse of a fisherman's net) from the edge of the flowing tide, and conveying them one by one beyond the usual flux of the tide, or just above high water mark, and there deposit them under the larger stones or broken rocks, after having most amply satisfied the immediate calls of hunger.

The Crow, like the Magpie, is extremely garrulous at the sight of a fox or other small quadruped, and frequently gives information to the sportsman of the track of the hunted animal.

It will strike at a hare nearly half grown, and by repeatedly buffeting, make a prey of the exhausted animal. In a summer evening's ramble, we observed one of these birds make repeated pounces at something in a field, where the grass was nearly a foot high, and at the same time some animal was seen to erect itself upon the hind legs, and stoutly defend itself. After a contest of some minutes, curiosity prompted to discover what the animal was, and upon nearer approach, discovered it to be a young hare.

A similar circumstance, but of a very different animal, occurred, in which the Crow met with his match.

Taking a morning's ride, several Crows were heard in a neighbouring field to be very clamorous; judging that they had seen something that induced them to give the alarm call, and assemble all their congeners within hearing, we rode to the spot, where we arrived just in time to witness a feat of activity, and intrepidity, that afforded inexpressible delight. Many and repeated pounces were made at some diminutive animal on the ground, but what, the little grass there was prevented us from seeing: however, in a few minutes, a small creature was observed to meet a Crow in its descent, who had been more bold than the rest, and made a nearer approach; and a consequent struggle ensued on the ground; but of short duration. At this crisis we approached, and found that a Weesel had seized a Crow by the neck, and had killed it, but ran from its prey, and took shelter in a neighbouring hedge till we had retreated to some distance, when the little animal returned and dragged the crow under cover of the bushes.

The Carrion Crow and the Rook are both found as far north as Zetland, but are only occasional visitants. The Hooded-crow is common and stationary, as well as the Raven.

CROW-BLACK-NEBBED. Vide Crow-Carrion.

CROW-GREAT-CORBIE. Vide Raven.

CROW-MARKET-JEW. Vide Crow-red-legged.

CROW-MINDEN. Vide Crow-carrion.

CROW-NIGHT. Vide Goatsucker.

CROW-RED-LEGGED. Corvus graculus.

Lath. Syn. Sup. ii. p. 115. No. 16. Bewick Br. Birds, 1. t. p. 80. Shaw. Zool. vii. p. 378.

PROVINCIAL.

Chauk. Daw. Market-jew-crow.

Is said to be common about all the high rocks of the southern latitudes of Siberia; also about Mount Caucasus, as well as the mountains of Persia; and that in the first year the bill and legs are black.

This circumstance is very extraordinary, and may be attended with some doubt as to the identity of the bird, since the red bill and legs attained the first year, is with us orange from the nest.

We have had one of these birds alive for some years; he is extremely docile, but his mischievous qualities, and shrill notes, have occasioned his confinement within the walls of the garden. His curiosity is beyond bounds, never failing to examine any thing new to him: if the gardener is pruning, he examines the nail-box, carries off the nails, and scatters the shreads about. Should a ladder be left against the wall, he instantly mounts and goes all round the top of the wall, and if hungry, descends at a convenient place, and immediately travels to the kitchen window, where he makes an incessant knocking with his bill, till he is fed or let in; if the latter, his first endeavour is to get up stairs, and if not interrupted, goes as high as he can, and gets into any room in the attic story; but his intention is to get upon the top of the house, for it is the nature of this bird to affect elevated situations.

He is excessively fond of being caressed, and would stand quietly by the hour to be smoothed; but resents an affront with violence, and effect, by both bill and claws, and will hold so fast by the latter that he is with difficulty disengaged.

Is extremely attached to one lady, upon the back of whose chair he will sit for hours; and is particularly fond of making one in a party at breakfast; or in a summer's evening at the tea-table in the shrubbery.

It is

It is remarkable, that when at liberty, he is never observed to go upon the grass by choice, and it requires very strong temptation to induce him to step off the gravel.

His natural food is evidently the smallest insects, even the minute species he picks out of the crevices of the walls, and searches for them in summer with great diligence. The common grasshopper is a great dainty, and the fern-chaffer *Scarabæus horticola* is another favourite morsel; these are swallowed whole; but if the great-chaffer *melolontha* be given to him, he places it under one foot, pulls it to pieces, and eats it by piece-meal. Worms are wholly rejected, but flesh, raw or dressed, and bread he eats greedily; and sometimes barley with the pheasants, and other granivorous birds occasionally turned into the gardens, and never refuses hempseed.

He seldom attempts to hide the remainder of a meal; eats little at a time, and at certain times he appears to regurgitate like ruminating quadrupedes. Whether this is a part of his last meal that may be in a reservoir under the tongue as in the rook, or whether it proceeds from the craw, we have not the means at present to determine; but the act of regurgitation is marked by reiterated motions of the head, like a bird that has something stuck in his bill and wanting to swallow it. When full fed, and he is offered food, it sometimes appears to urge that motion, as if he was trying to find if more could be conveniently taken.

With a very considerable share of attachment he is naturally pugnacious, and the hand that the moment before had tendered him food and caresses, will repent an attempt to take him up. To children he has an utter aversion, and will scarcely suffer them to enter the garden. Even strangers of any age are challenged vociferously; he approaches all with daring impudence, and so completely does the sight of strangers change his affections for the time, that even his favourites

favorites and best benefactors cannot touch him with impunity in these moments of evident displeasure.

CUCKOW. Cuculus canorus.

Phil. Trans. lxxviii. p. 219 (Jenner). Shaw. Zool. Lect. i. t. 60. Bewick Br. Birds i. t. p. 108. Lath. Syn. Sup. ii. p. 133.

PROVINCIAL.

Gowk.

The egg of this bird is very little known, even many able ornithologists have mistaken that of some other bird for it. Sepp has fallen into this error, and has figured the egg of the Goatsucker for it.

There are some insects and worms that appear to be rejected by most birds. The Thrush most greedily devours the *Limax* of the *Helix nemoralis*, but will not eat a naked *Limax*; this is left for the Duck, which is almost the only bird that will swallow that slimy morsel.

Few birds but the Titmice will devour the *larvæ* of the cabbage Butterflies; and none that we have noticed make a repast on the hairy species of caterpillars but the Cuckow, who is a general devourer of all kinds of *Lepidopterous larvæ*, more especially the rough sort. It is therefore probable that the early remigration of this bird is the defect of this favourite food, the greater part having by that time enclosed themselves preparatory to a change. Of the many Cuckows we have dissected in the months of May and June, the stomach has always been found to contain more or less of the hairs of catterpillars, and sometimes quite full of them.

Many attempts have been made to keep this bird, but it rarely lives beyond the first winter; and most frequently dies in the winter months. We have, however, known one or two instances of its surviving the frigid season, but never more than

than twelve months; nor could we ever learn that in confinement it acquired its mature plumage, and vernal song.

A young Cuckow was brought to us in the month of July just as it could fly, and by the greatest care and attention of a young lady, kept alive till the fourteenth of December.

It had been two or three times ill of a dysentery, but by giving it chalk and ginger, in small quantities, was recovered. No change in the plumage had taken place when it died.

It was extremely choice in its food, nothing appeared to be acceptable as a substitute for insects but raw flesh, and it preferred beef to any other. Flies when they could be procured, were quite a regale, but its most favourite repast was any species of hairy caterpillars. These it seized with avidity, shook them to death, and softened them by passing them through the bill backward and forward several times, till they were perfectly relaxed and pliant, and then it would swallow whole the largest of the *larvæ* of the Egger, or Drinker moths, *Phalæna quercus* and *potatoria.*

It is remarkable that for two months after this bird was captured, it never attempted to feed itself by pecking, but like a nestling bird, would open its mouth to be fed with raw flesh from the fair hand of its mistress, like one of Bruce's Abyssinian chiefs, gorging *brind* from the hand of the ladies of distinction; and even to the last moment preferred being fed in that manner, rather than be at the trouble of picking up its food.

It was always pugnacious, which it shewed by elevating its back, lifting its wings, and striking with the bill; but would suffer to be handled, and caressed by the young lady, its kind benefactress, and appeared to like the warmth of her hand to its feet. Of strangers, it was extremely fearful, and would flutter against the cage to avoid them.

Notwithstanding the feet of the Cuckow appear to be formed for climbing, like those of the Woodpecker, yet it

was evident this bird had no such power, but the disposition of the toes gives a very powerful grasp.

As the young of the Cuckow differs so materially in the first years plumage from the adult, it may not be improper to give a description for the information of those who may wish to know the distinction.

The irides are greyish: the whole upper part of the plumage is a mixture of dusky-black and ferruginous, in transverse bars, except the forehead, and a patch on the back of the head, which (in this specimen) is white; and the tips of the scapulars are pale: the feathers of the whole under parts are sullied-white, with distant transverse bars of dusky-black, in general each feather possesses two or three bars: the sides of the neck and breast tinged with rufous: the lateral feathers of the tail, and the inner webs of the quills, more or less barred with white: the coverts of the tail, which, as well as those on the rump, are unusually long, dashed with cinereous, and slightly tipped with white.

In the Gentleman's Magazine for April, 1806, a curious story is related, where, it is supposed that the foster parents of the young Cuckow not being capable of furnishing a sufficient supply of food, call to their assistance the whole race in the neighbourhood. "I have seen" (says this natural historian) "an instance in this neighbourhood of this feathered "monster being occasionally fed by upwards of twenty "Titlarks."

Another relation is, that, "forty-eight Wagtails were "frequently counted; all employed in bringing food to a "young Cuckow.

Extraordinary as is the circumstance of the parent Cuckows making no provision for its offspring; yet the many and repeated opportunities we have had of attending to the rearing of young Cuckows by its foster parents alone, will not allow us to add the above phenomenon to its history. It

is

is true, the Wagtail and Titlark will frequently assemble about a young and helpless Cuckow, but it is to insult him by loud vociferations, mistaking him for a Hawk; and thus by notes of alarm, assemble all their tribe within call, as Swallows do when a bird of prey appears.

CURLEW-BRASILIAN.

This bird, the *Scolopax Gaurauna* of Linnæus, *Numenius Gaurauna*, Brasilian Whimbrel of Latham, is said to have been taken in England. In the seventeenth volume of the *Naturalist's Miscellany* there is a figure given, entitled Brasilian Curlew, which was shot in Anglesea, about the end of September, 1806; and is said to be preserved in the collection of Miss Hester Meyrick, of Beaumaris.

Whatever may have been the opinion of those who first examined the bird in question, which perhaps was in a putrid state, as was the case when it came to the hands of the lady above mentioned, there is certainly nothing in the figure, that can warrant an opinion, that it can possibly represent the brown bird which the Brasilian Whimbrel is generally described to be; nor has it any of the white markings on the neck, and other characters that distinguish that species. The author of the miscellany very justly remarks, "that it "cannot escape the attention of every naturalist, that, except-"ing in the generic particular of the naked front, this bird "bears a very striking general resemblance, both in size and "colour to the *Tantalus igneus* and *Tantalus Falcinellus*, "the former of which has been occasionally observed in this "country."

It must, however, be observed that the generic distinction between the Ibis and Curlew is but obscure in some species, for the very small bare space between the eye and the bill, in the *Tantalus igneus* might readily be overlooked, especially

as

as it is of a dark colour, like the surrounding feathers; in two specimens now before us, it is scarcely obvious through the glass of the cases. From the description we have been favoured with from Miss Meyrick, (who says that the bird came to her in so putrid a state, that the circumstance of the bare space was not observable, and that the hind toe was long as represented in the figure referred to) not a doubt exists in our mind, that it was that variety of *Tantalus igneus* called the Green Ibis, hereafter described.

It is remarkable that where characters were so much wanting to designate the two genera of *Tantalus* and *Numenius*, (for the latter is certainly distinct from *Scolopax*, though blended by Linnœus) that the length and situation of the hind toe should not have occurred; Linnœus himself overlooked this character, which appears so materially to separate the *Tantalus*, from either the *Numenius*, *Scolopax*, or *Tringa*, all of which have a short hind toe, not situated at the heel so as to tread flat upon, but placed higher, and in general scarcely bearing more than the claw upon the ground. On the contrary, the *Tantalus* has a long hind toe affixed to the heel; a complete continuation of the foot for bearing on the ground its whole length, in order to support the body.

As a professor of British Zoology, we trust, (as we are now writing professedly on the subject of British birds,) that what we have said will be taken in good part by those who may differ in opinion with us, being all equally liable to error. It is our duty to discover, as far as we are able, what really belongs to the natural history of the empire, and to express our doubts, where such exist upon reasonable grounds.

CURLEW-COMMON. Numenius. Arquata.

Bewick, Br. Birds. 11. t. p. 54. Shaw, Zool. Lect. 1. t. 77.

PROVINCIAL.

Whaap, or Stock-Whaap.

There

There are not many of the shore birds, or such as inhabit the margins of waters, but what are capable in some degree of contending with that element if necessity requires; some cannot only swim but dive; a circumstance not unusual in the common sandpiper. But it must be confessed we were surprised to observe a domesticated Curlew flirt into a pond and swim across with great ease, and by no means as if alarmed. This we have repeatedly observed when he was driven, but he never took to the water by choice.

It is reasonable to conclude that all the waders, or such as pick up their sustenance on the borders of water, can, under certain circumstances partake of the nature of aquatics.

The Curlew in his natural state is so remarkably shy, that he is with difficulty approached; but like other birds wholly dependent for their daily subsistence, soon becomes docile. One that was shot in the wing, was turned amongst aquatic birds, and was at first so extremely shy, that he was obliged to be cramed with meat for a day or two, when he began to eat worms; but as this was precarious food, he was tempted to eat bread and milk like Ruffs. To induce this substitution, worms were put into a mess of bread mixed with milk, and it was curious to observe how cautiously he avoided the mixture, by carrying every worm to the pond, and well washing it previously to swallowing. In the course of a few days this new diet did not appear unpalatable to him, and in little more than a week he became partial to it, and from being exceedingly poor and emaciated, got plump and in high health.

In the course of a month or six weeks, this bird became excessively tame, and would follow a person across the menagerie for a bit of bread, or a small fish, of which he was remarkably fond. But he became almost omnivorous; fish, water-lizards, small frogs, insects of every kind that were not too large to swallow, and (in defect of other food) barley with the ducks was not rejected. This

This very great favourite was at last killed by a rat, (as it was suspected,) after a short life of two years in confinement; but he had in that time fully satisfied our enquiries into his natural habits.

The bill of this bird is stronger than that of the Snipe, or Woodcock, and therefore can be inserted into harder ground, and by being slightly arcuated, can sometimes be insinuated where a straight bill could not. By this useful instrument he also defends himself with courage, as we had frequent occasion to observe ours contend for food with the Shieldrakes, and even with the common Gull; keeping his antagonist at a distance by the length of this weapon.

Few of this species breed in the southern parts of England, but we are informed that upon the higher hills of Exmoor, it usually appears in the spring, and deposits its eggs amongst the heath.

CURLEW-PIGMY.

A specimen of this very rare bird has been shot in England within these few years, and is now in the collection of Mr. Bullock, the proprietor of the *Liverpool Museum*.

This bird does not appear to have any more claim to a place amongst the Curlews, than many others of the genus to which it properly belongs, for it is most certainly a *Tringa* and not a *Numenius*.

The slight arcuation of the bill had doubtless attracted the particular attention of the original discoverer of the bird in question; but on this account, no real grounds existed for separating it from the Sandpipers, which appear to be its true congeners. The Dunlin, the Purre, and the Purple Sandpiper, all have their bills slightly deflected, and perhaps fully as much as this bird, in proportion to the length of that part. We might with as much propriety place some

of

Pigmy Curlew.

of the Godwits with the Avoset, for a similar reason, that their bills reflect. This bird should therefore be removed to the genus *Tringa*, and in order to prevent confusion, should retain its trivial name *pigmea*.

The comparative size which was originally given to this bird is by no means sufficiently large, nor corresponding with its superior weight to that of a Lark. It is rather superior in size to either the Dunlin, or the Purre, and approaches so very nearly to the latter in one change of its plumage, that were it not for some trifling variation, and a little difference in the bill and legs, they might easily be confounded, by a more than ordinary Ornithologist. Indeed so very nearly do these two birds approach each other, that, although we have no doubt of their distinction, it may be useful to particularize in what they essentially differ, in order that this species may be identified, and prevent that confusion which has probably so long existed, and lead to a more perfect knowledge of a bird that may be only considered as rare from its obscurity, caused by its great similarity to so plentiful a species as the Purre.

The specimen from which the original description was taken, and the figure given in Mr. Boys's History of Sandwich, is now before us. The most obvious distinction between it and the Purre, as permanent characters, consists in the superior slenderness of the bill and the legs, as well as in the length of the latter. A remarkable distinction is also observable in the thigh, which in this, is bare of feathers for half an inch above the knee, whereas in the Purre, that part is clothed to very near the knee joint. The plumage of the head and neck is more inclined to rufous-brown, and the breast is destitute of the dusky streaks on the shafts of the feathers observable in the Purre: the belly and sides are not of that pure white, and are wholly destitute of those minute spots so common on the sides of the Purre: the feathers on

the

the back and scapulars of this specimen of *pigmea*, are margined with rufous-white; but as these pale margins are frequent in young birds, and not in adults, it may not be permanent: the lower part of the rump and coverts of the tail are immaculate white: the tail is not so cuneiform as in the Purre, although the feathers are of a similar cinereous colour: in the wings there is scarcely a distinction between the two birds, in their closed state.

CURSORIUS.

The Cursorius is now generally considered as distinct from the Plover genus, of which there are but two known species: the characters are,

Bill round, incurvated near the end, and pointed.
Mouth large.
Nostrils ovate.
Tongue sharp.
Legs and feet formed for running; toes three, placed forwards; no back toe.

CURSORIUS-EUROPÆUS. Plover-cream-coloured. Orn. Dict.

We are assured by Mr. Dickinson, that a specimen of this very rare bird was shot in *North Wales*, in the year 1793, by Mr. George Kingstone, of Queen's College, Oxford, a very accurate Ornithologist: the bird was preserved in the collection of the late Professor Sibthorp.

CURWILLET. Vide Sanderling.
DEVILING. Vide Swift.
DIPPER. Vide Ouzel-Water.
DIRTEN-ALLAN. Vide Gull-Arctic.
DIVER-IMBER. Colymbus Immer
Great Ducker or Embergoose. Bewick 11. p. 185.
Lesser Imber. Bewick. p. 187.

Mr.

Mr. Bewick not being aware of the circumstance of this species varying so much in size, has given the female as a distinct species under the title of Lesser Imber.

We have both sexes of the Imber now before us, between which there is a very material difference in size, but little in plumage.

The female is but a trifle larger than the Lesser Imber of Bewick, and in the plumage well accords. This bird (in excellent condition) weighed four pounds ten ounces; length two feet three inches, breadth three feet ten.

The male weighed six pounds eight ounces; length two feet seven inches and a half; breadth four feet seven inches.

In point of colour of the plumage, there is very little difference, and as they are both recent and in high feather, a full description of the female will serve for comparison.

Bill, three inches and a half long from the apex to the gape, of a bluish grey, dusky on the ridge; the upper mandible bending a trifle downwards, and longer than the under; irides yellowish-hazel; the upper part of the head, and upper neck behind, cinereous brown, but the brown predominates most on the latter; sides of the head, and sides of the neck, white, minutely speckled with cinereous brown; the feathers on the lower part of the neck behind, back, scapulars, and all the wing coverts except the largest row, black, deeply bordered with cinereous grey: rump the same, but slightly margined: the whole under parts from chin to tail pure white, except a few grey feathers about the vent: the quills are dusky black, the primaries pale on the inner web; secondaries white on the margin of these webs quite to the tips, the whole more or less white at the base: the first row of larger coverts similar to the quills, without any white: the tail consists of eighteen black feathers, slightly tipped with white: legs dusky on the outside, bluish-grey within and on the edges: inner toes like the inside of the leg, the exterior

one

one corresponds in colour with the outside; the middle of the webs paler than that part nearest the toes.

Mr. Bewick describes the female Imber to be of a dull brown on the upper parts, and dull white beneath. Such are probably young birds not arrived at full plumage.

The Imber is by no means a common bird in the southern parts of England.

The whole tribe are great devourers of fish, but they are incapable of swallowing such as the Corvorant gorges with ease; sprats, smelts, atherines, and others of similar size, it takes in great abundance; and they are frequently observed to attend shoals of such fishes. In one specimen of the Imber we dissected, there was an abundance of spotted gobies in the stomach.

DIVER-LITTLE-BLACK and WHITE. Vide Auk-Little.

DIVER-MAGPIE. Vide Smew.

DIVER-RED-THROATED. Colymbus Septentrionalis. Bewick Br. Birds, 11. t. p. 193.

Mr. Pennant noticed the male and female of this species in Sunderland, in the month of July, (Voyage to the Hebrides.)

Mr. Fleming assures us it breeds on the more unfrequented lakes of Zetland, and from a circumstance that occurred, some doubts arose whether this, and the Black-throated-Diver might not be the same species, differing only in sex.

This gentleman says in a letter to the author, "I surprised the two birds together on the verge of a lake, while they were intent upon a young unfeathered bird, and shot the Red-throated-Diver with the young bird, which proved a female; the other escaped, but I was so near that I could not have been deceived as to the mark on the throat."

Experience has shewn that some birds vary in plumage so much at different seasons, that species have been continually multiplied from this circumstance alone; but in this instance

we

we are still inclined to believe these birds are really distinct. The Black-throated-Diver has been described by most naturalists as a distinct species, and appears to have been particularly noticed as an inhabitant of the arctic regions, where they breed, and afterwards retire. It must, however, be admitted, that the Black-throated-Diver is extremely rare on the coast of Britain, a circumstance that must favour the opinion, that the black on the throat may vanish after the breeding season, and be substituted by the ferruginous feathers which characterizes the Red-throated species. But it must also be remembered that this is not the only distinguishing mark, for if we attend to the descriptions of the two birds, there is a material difference in other parts of the plumage. It may, however, be urged, that, these are as likely to change with the season as the feathers on the throat. We have given these hints as the result of the observations of a correct naturalist, in order to stimulate those who may have the means of clearly ascertaining the fact, not to lose the opportunity. One of the principal objects of enquiry, appears to be this: has the Black-throated-Diver been observed in winter?

With respect to the Red-throated-Diver being a distinct species; it has been asserted, that both the sexes have the red-throat as well in summer as in winter.

Whether by dissection, or by what other means Mr. Pennant ascertained the two sexes in July, we are not informed, but that both sexes with the red throat are obtained in winter, we have had ocular demonstration. The male is larger than the other sex, the colours brighter, and the red or ferruginous mark on the throat much larger.

The Red-throated species is by no means uncommon on the more southern coasts of Great Britain, in the colder season, but does not appear to frequent fresh waters at that time of the year.

Where

Where any suspicions have arisen from persons of science, grounded upon observation, that cannot be opposed by fact, it is but fair to record it; and we must acknowledge, that the Black-throated-Diver has never come to our hands at any season of the year, and is at present one of the few *desiderata* in our museum.

DIVER-SPECKLED. Colymbus Stellatus.

First speckled Diver. Bewick 11. t. p. 189.

Second speckled Diver. Bewick 11. t. p. 191.

An opportunity offered, in a tour we made through the fens of Lincolnshire, of noticing and comparing the rate at which this bird can swim, both on the surface, and under water.

As late as the twenty-fourth of May, we observed one of this species fishing in a canal, and got very near him unobserved. He did not attempt to fly, but instantly dived, at which time we exerted ourselves to the utmost in a walk, in order to discover which gained upon the other, and soon found that immersed he gained considerably, and did not lose much when upon the surface, so that after exerting ourselves for above half a mile, without a prospect of cutting off his retreat, we were obliged to run in order to head him.

If we compute the rate of walking for a short distance to be five miles an hour, the swimming of this bird upon the surface might be about four miles and a half, and beneath the surface between six and seven. The general distance between the place of immersion and that of emersion, appeared to be about eighty or ninety yards; and as there was neither current nor wind, and the line was quite straight, and the foot-path good, it is probable the computation is not very incorrect.

It is observable, that all birds, and even quadrupedes, who reside much in water, are aware of their superior powers of velocity beneath the surface, for they invariably dive when pursued;

pursued ; or when ever speed is required, and only rise to the surface for renewed respiration.

DOTTREL. Charadrius Morinellus.

Bewick Br. Birds 1. t. p. 343. Rural Sports ii. t. p. 456.

It should seem that this bird has been seen in some parts of Great Britain throughout the year, the natural conclusion of which is that some actually breed with us ; but no person to our knowledge, has been fortunate enough to take their eggs so as to be clearly identified by a competent judge. It is true a person of credit who frequents the Mendip hills in Somersetshire, declares that they breed there, and that he has taken their eggs. Young birds are frequently shot early in September, upon those hills and similar situations, but that is no proof of their breeding there, as the nestling plumage continues till towards the following spring, and is very different from the adult, being entirely destitute of the bands on the breast, and the ferruginous and black on the belly.

Colonel Thornton in his *Sporting Tour*, p. 104, says he killed a Dottrel on a highland mountain, August the 16th, and saw several brace.

The same gentleman informed us that he saw Dottrels in pairs, on the Grampian Mountains, but never saw a young bird, (meaning a runner incapable of flight).

From all accounts it is quite an alpine bird in the breeding season, and probably breeds with, and may be confounded with the Golden Plover, in the highland swamps.

It is very rare so far west as Devonshire, at least, one only has come to our notice in many years ; but probably they are occasionally upon the higher mountains of Dartmoor, where the Golden Plover is said to breed. We suspect this last bird is sometimes mistaken, in its summer plumage for the Dottrel, the eggs of which may have been taken on the Mendip hills.

DOTTREL-RING. Vide Plover-Ring.
DOVE-ROCK. Columba Œnas.

The Pigeon both in the wild and domestic state, is considered as wholly granivorous; necessity however, compels them to pluck the leaves of some plants in the winter, when seeds or grain are not to be obtained. This is not, however, the only substitute, for they greedily devour some species of testaceous *Limaces*, especially *Helix virgata*, which so plentifully inhabits the dry rocky hills, contiguous to where this bird breeds in its natural wild state.

This species of *Helix* was so abundant with us, that on the lawn a foot could not be planted in the summer without crushing a dozen or two. The introduction, however, of Pigeons, very unexpectedly has been the means of nearly extirpating them, for they not only regale themselves, but feed their young with this tender and nutritious food, the shell of which not only acts as a gentle stimulus to the delicate stomach of the infant race, but when ground to a powder becomes an absorbent, and corrects the acrimonious quality of their other food.

DUCK-ATTEAL or ATTILE. Vide Pochard.
DUCK-CLUCKING. Vide Duck-Bimaculated.
DUCK-COMMON.

Lath. Syn. Sup. 11. p. 351. Lin. Trans. 4. p. 112. No. 17. t. 13. f. 10. (the Trachea.)

PROVINCIAL.
Stock-Duck.

The bony labyrinth at the lower end of the *trachea* of the male of this species, is an evident proof that such a conformation is not given for the purpose of augmenting the voice of birds, as every one knows the mallard's note is remarkably low, and nothing to compare to that of the duck.

Doctor

Doctor Latham remarks, that the male Muscovy Duck will not unfrequently produce with the common species.

Observing at a farm house some Ducks that had the appearance of being a mixed breed between these two species, enquiry was made, and the farmer assured us he had seven young ones, the sire of which was of the Muscovy breed; two of these of apparent different sexes were obtained.

These hybrid birds, bear a greater resemblance to the common than to the Muscovy species. The bill has a little reddish colour at the base, but there is no bare space about the eyes as in the Muscovy, nor has the male the curled feathers in the tail like the common Mallard. The size of the male is vastly superior to that of the female; the former is black on the crown of the head and the upper part of the body, glossed with purple and violet; the rest of the plumage is white. The female is quite white except a single spot on the head. They have not the note of the common species, at least the female note is as inaudible as that of the other sex.

The male hybrid is observed to be frequently amorous, both with his own mate, and with Ducks of the common sort, but the female never laid any eggs. We cannot perceive any thing in the appearance of the young of other Ducks with which the male had congress, that proves them to be the fruit of such connexion; and the Ducks were not debarred access to males of their own species. That the male hybrid possesses a strong stimulus to love in the spring, is evident, for the want of other connexion induced him to worry a female Whistling Swan so much, that they were obliged to be separated.

The Common Duck, as well as other wild fowl, becomes scarcer every year in a country like this, where agriculture makes so leading a feature; few comparatively remain to breed with us since the more extensive fens have been drained and converted into pasture. The great fenny tracts in Lincolnshire

colnshire do not produce a dozen broods of wild fowl at present, where half a century back as many thousands were hatched. In a tour through that country during the incubating season, we observed that the Mallards congregated while the Ducks were sitting; it is therefore probable, that like the domestic ones, they are mostly polygamous.

Many instances are recorded of the common Duck depositing her eggs at a considerable height from the ground. One mentioned by Mr. Tunstall, at Etchingham, in Sussex, was found sitting upon nine eggs, on an oak tree twenty-five feet from the ground.

The author of the *Rural Sports* also records an instance of a Duck taking possession of the deserted nest of a Hawk in a large oak. To these we may add upon the assurance of a gentleman of the strictest veracity, that of a large flock of half domesticated Ducks, one deposited her eggs in the principal fork of a large elm tree near his house, and brought her young down in safety, notwithstanding a Magpie had made a nest on the top of the same tree. Thus Mag was found to live in friendship with his neighbour in the first story, and sought for plunder further from home.

DUCK-DUNTER. Vide Duck-Eider.

DUCK-EIDER.

Bewick Br. Birds, ii. t. p. 314.

PROVINCIAL.

Dunter-Duck.

This species rarely occurs in the southern parts of the kingdom; one, however, was shot in the winter of 1807, on the coast of *South Devon*, it was a female, and as it differed somewhat from that described in the former part of this work, we shall insert an accurate description of it in this place.

Larger than the common Duck. The bill dusky, nail horn

horn colour: irides yellowish. The whole plumage of a dusky colour, mixed with ferruginous: the head and neck pale brown, more or less dashed with ferruginous and dusky streaks: back, scapulars, and smaller coverts of the wings dusky-black, each feather margined with ferruginous-brown: quills dusky, palest on the inner webs and points of the secondaries: (but no white band, or bar on the wing as usually described:) the breast and whole under parts a mixture of pale ferruginous and dusky in small specks and streaks: the tail short, cuneiform, and of a dusky-brown colour: legs and feet dusky-black; the hind claw remarkably hooked.

The feathers on the front project unusually on the sides of the bill, being on that part an inch forwarder than on the top, leaving the bare bill only about an inch in length.

The excessive velocity with which some birds are capable of flying, may be estimated by the observations of Major Cartwright on the flight of the Eider Duck on the coast of Labrador, which he found by repeated experiment to be ninety miles an hour.

If then the Eider (which is by no means remarkable for swiftness) is found to pass over a space equal to ninety miles in an hour, what may be expected of the Falcon and some other birds? But more on this subject will be found elsewhere.

We are told it is no uncommon circumstance for two female Eider Ducks to lay in the same nest, set alternately, and sometimes together.

The natives of Iceland and other northern countries rob the nests of these birds several times of the down, which they pluck from their bodies to cover their eggs in their absence, and thereby prevent their parting with their heat, during their excursion at sea in search of food. Thus instinct has taught these feathered philosophers, that no substance within their reach could possibly have answered the end so

 compleatly

compleatly ; for the very light, elastic, fibrous substance of down, is almost a non-conducter of heat, and consequently prevents the ready dispersion of caloric, which becomes entangled amongst its fibres, and as it were shuts the passages from the surrounding atmosphere for a great length of time. In the same manner a heated ball or a bottle of water covered with a blanket, or put into a thick flannel bag, may be made to retain its heat vastly longer than if exposed to the circumambient air; and if surrounded with eider down in form of a quilt, a still greater time would elapse before its temperature could assimilate with that of the atmosphere.

Eider down (which is so much used amongst the opulent in the more civilized parts of the northern world) has not in itself any additional heat (as is vulgarly imagined) beyond other substances, for it would equally preserve ice from thawing as it would heated water, or eggs from cooling, upon the sole principle of its being a bad conductor of caloric, and consequently would cut off a ready communication between the ice and the warmer air.

Coverings for beds, quilted or stuffed with eider down, keep the body warm by interposing an obstacle to the expenditure of animal heat, by shutting the avenues to the colder air, which in a friged climate so rapidly carries off caloric.

For a similar purpose are blankets used in our more moderate climate, and the finer the wool of which they are manufactured, and the more shaggy they are, the better will they answer the purpose for which they are intended.

It is a mistaken notion that only eider down is used for the purposes above mentioned. It is true all the down which is taken by the natives of the more northern regions is sold for such, but many others of the Duck tribe afford down not inferior to that of the Eider, but none in such great abundance: these however are mixed together and carried to market without discrimination.

Ferruginous Duck

DUCK-FERRUGINOUS. Anas ferruginea.

Anas Nyroca Gmel. Syst. ii. p. 542. Ind. Orn. ii. p. 869.
Tufted Duck, Var. A. Lath. Syn. vi. p. 541. No. 79.
Olive-tufted Duck, Br. Miscel. 1. t. 21.

Till lately we never had met with any species of Duck which could be referred to the ferruginous originally described by Mr. Pennant, and which was without doubt a female.

A specimen which we suspect is the male, shot in the north of England, (we believe in the Humber) is now before us; a description of which, in addition to the figure which accompanies it, cannot fail to be interesting to the Ornithologist.

Length about nineteen inches: bill rather long, and deep at the base, flattish at the point, and of a dark lead colour, with the nail black. Head and neck small, of a dark ferruginous: the lower part of the neck behind, back, scapulars, coverts of the wings, and upper coverts of the tail dusky-brown, with a slight tinge of ferruginous: on the chin is a small spot of dirty white: the lower part of the neck before, and the whole breast chesnut; beneath which the body is white to the thighs, which with the part between them as far as the vent, are brown, minutely speckled, becoming black about the vent; behind that, including the under tail coverts white: the feathers on the sides under the wings, extending to the thighs, are bright ferruginous: the primary quills are whitish at their base, dusky at the tips, and on the outer webs, becoming less so as they approach the secondaries, which are wholly white except the points, and form a white speculum on the wing when closed: the tertials, and the coverts immediately impending the secondaries, are dusky, bronzed with green: the other darker parts of the plumage partake more or less of metalic lustre in some points of view,

especially

especially the scapulars: the under scapulars are white: the tail is a trifle cuneiform, consisting of fourteen dusky brown feathers slightly tinged with ferruginous: feet rather large, which with the webs and legs are lead colour: the middle toe rather longer than the outer one: claws black.

The eyes appeared to have been yellow; but the sex could not be ascertained; the brightness of the plumage however, should indicate the gender to be masculine.

We really suspect this to be the male of the Ferruginous Duck of the *British Zoology*, and copied from that work by all succeeding writers. It is most certainly the Olive-tufted Duck of the *British Miscellany;* and we think there can be no doubt that it is the *Nyroca* of Gmelin.

It must be confessed many of the Duck tribe are still in great obscurity, as it is well known that some species differ so essentially in their plumage at different ages and seasons, that naturalists have been, and will continue to be at variance with each other, and occasionally with themselves. Thus the *Nyroca* was originally considered by Doctor Latham as one of the varieties of the *Fuligula*, but in the latter works of that author it is given as a distinct species.

The description given of var. A. of the Tufted Duck in *Latham's Synopsis*, accords so nearly with this, that we are induced to consider it as such. Upon the whole, therefore, the *Anas Ferruginea* and *Nyroca* appear evidently one and the same species, the former being of the feminine, the latter the masculine gender.

Doctor Latham expresses a doubt whether the *Ferruginea* is not the female of *Anas Dispar*, but we trust he will now be inclined to accord with our opinion, and bring together all the synonyma of *Nyroca* as the male, and those of *Ferruginea* as the female, under the English appellation of Ferruginous Duck.

DUCK-HARLE.

DUCK-HARLE. Vide Dundiver.

DUCK-LONG-TAILED. Anas glacialis.
Bewick Br. Birds, ii. t. p. 363.

PROVINCIAL.
Caloo or Calaw.

This species very rarely visits the southern coast of England, but in its autumnal migration from the arctic regions is contented to winter in the northern parts of Scotland. One instance only (a female) has occurred to us in the south, and that was shot in Devonshire.

We are assured by Mr. Fleming, that it is common in Zetland from October to April.

Mr. Neill in his tour through Orkney and Shetland, says this bird is called by the whimsical name of *coal and candle light,* from a fancied resemblance of its long and plaintive winter-call to these words. This gentleman is quite sure that the name of *Caloo* is given to this bird, and not the Pintail as stated in Dr. Barry's History of Orkney, having received stuffed specimens from thence.

The female in our possession has no other resemblance to the other sex than the large oval spot on each side of the neck just below the head, which in this bird is dusky. Weight 14 ounces: length 15 inches and a half: irides light hazel: bill is bluish, with the ridge and nail black: the forehead is dusky, spreading as it passes backwards on the crown and back of the head: the sides of the head before the eyes, light brown, growing paler about the eyes, and becoming white in an angle nearly an inch behind each eye; beneath the white is a large oval patch of dusky; under this is a patch of white: the back of the neck, as well as the front, from the chin downward grey-brown, darkest above and on the chin: the back of the neck below the lateral white spot is dusky-brown, becoming dusky-black on the back, and rump, slightly

slightly glossed with purple: the scapulars are pale brown, with the margin of some of the feathers cinereous: the coverts of the wings dusky-black: primary quills the same: secondaries tinged with ferruginous, which increases on the tertials, and glossed with purple: the feathers on the wings beneath are dusky: the fore part of the neck below the lateral white patch is dusky-brown, shaded to a grey, mixed with pale ferruginous-brown on the upper part, and sides of the breast: the lower breast, belly, vent, and under tail coverts white: the tail is cuneiform consisting of fourteen dusky-brown feathers, the outer ones lightest and edged with white; the colour of these feathers beneath is cinereous: legs and toes blueish-grey; the webs and the feet beneath dusky.

DUCK-OLIVE-TUFTED. Vide Duck-ferruginous.

DUCK-PINTAIL. Anas acuta.

Lath. Syn. Sup. ii. p. 354. Lin. Trans. iv. p. 110. t. 13, f. 6. (Trachea.)—Bewick Br. Birds. ii. t. p. 360.

PROVINCIAL.

Winter-Duck.

By the kind assistance of a nobleman who did us the honor to present us with some aquatic birds taken in his decoy, we have been enabled to ascertain some most important facts in the history of this species.

The males which have been domesticated for several years, gave us an opportunity of observing that they moult twice in the year, assuming at one period a very near resemblance to the female, which at other times is known to be so extremely dissimilar.

In the month of June, or beginning, of July, these birds commenced their change of plumage, and by degrees, after making a singular mottled appearance, especially on the part of the body which was white before, became by the first week

week in August, entirely of a brown colour. The beautiful bronze on the head, the white streak on each side of the neck, and all the white beneath, as well as the elegant scapulars, had all entirely vanished, and to all appearance a sexua metamorphose had taken place. But this change was of short duration, for about the latter end of September, one of the males began to reassume the masculine attire; the white on the under parts of the body, streaks on the neck and scapulars, and some bronze on the head were evident, and by the middle of October this bird was again in full plumage.

The other had then only began to change, and did not become perfect till the middle of November.

That such change is not the effect of confinement is evident from their excellent health, and having the range of a pond fenced off with some land attached to it that is planted with shrubs and trees. But to clearly decide that such a change actually takes place in a perfect state of nature, a friend to whom we are under many obligations for ornithological assistance, (the Rev. Mr. Holdsworth,) shot a male Pintail in the month of December, that had not compleated his perfect male plumage.

The following is the description of a Pintail after he had thrown off the masculine plumage; taken on the 19th of August.

Bill as usual: top of the head, and from thence down the back of the neck, dusky and pale ferruginous, intermixed in minute streaks, paler on the forehead; sides of the head and throat brown, with minute dusky specks tinged with ferruginous; the front and sides of the neck, brown, with dusky-black spots, which are minute on the upper part, becoming larger by degrees downwards, where they are also more distinct: the breast and belly very pale brown, with more distant dusky spots: the back, and scapulars, dusky-black, with pale margins, each feather having a transverse bar of white near the tip; the longer scapulars are only margined with rufous-white

white, and some are powdered with white: the rump, like the back, but these feathers gradually lose the white bar as they approach the tail, so that the tail-coverts are only margined with white: the feathers on the sides of the body being large, have broad margins, with the middle dusky-black, in which is either a ferruginous-white bar, or two spots, one on each side of the shaft: the prime quills dusky-grey as usual: the speculum changeable green, or copper, tipped with white, a violet bar dividing the green from the white: the first tertial is brown on the inner web, grey on the outer near the shaft, and a broad margin of violet; the rest of the tertials are brown dashed with cinereous, black near the shafts: the coverts of the wings plain dark cinereous, the largest series tipped with bay: the tail consists of sixteen dusky feathers dashed with cinereous, gradually becoming darker towards the middle feathers, which rather exceed the next in length, making the tail regularly cuneiform: vent, and under tail-coverts rufous-white, with distant black spots.

This double moulting in so short a time, peculiar to some species of birds, is a most curious and extraordinary circumstance that seems to bid defiance to all human reasoning.

That some birds should change their plumage with the season is evidently a gift of nature to accommodate their colour to their habits, as in the Ptarmigan that changes his mottled plumage in the autumn for that of white, in order that he may rest secure upon the bosom of the snow during winter. But there is no such evident reason for a double change in the short space of two or three months in the same season. The fact however now established will doubtless lead to discovery. It accounts for the Red-breasted Shoveler being only the common Blue-winged species, in the intermediate change of plumage; and it is probable all the males of that species would be found in the latter end of the summer or beginning of the autumn to assume more or less the female attire, with

that

that rufous tinge which has occasioned its being considered a distinct species. A shoveler of this description now in our museum was shot in August. vide Shoveler.

The Pintail has bred in confinement: and Lord Stanley informs us he has a hybrid brood between the female Pintail, and a male Wigeon. vide Wigeon.

The male Pintails in our menagerie, for want of the other sex, shewed inclination to pair with a female Scaup, till by accident she made her escape, and since that we were surprised to observe these birds court a Bernacle Goose, a bird so much larger.

One also paired with a tame duck, but which appeared too large for a union; more than twenty eggs which the Duck laid (part of which she sat on, and the rest put under a hen,) evidently were not fecundated.

The notes of the Pintail are extremely soft and inward; the courting note is always attended with a jerk of the head; the other greatly resembles that of a very young kitten

In the spring the male Pintail indicates his softer passions by suddenly rising his body upright in the water, and bringing his bill close to his breast, uttering at the same time a soft note. This gesticulation is frequently followed by a singular jerk of the hinder part of the body, which in turn is thrown up above the water.

DUCK-SCAUP. Anas Marila

Anas frænata Mus. Carls. fasc. ii. t. 38. (female)

Lath. Syn. Sup. ii. p. 351.—Lin. Trans. iv. p. 128 t. 14 f. 3. 4 (trachea).—Bewick Br. Birds, ii t. p. 339.

White-faced Duck. Br. Miscel. ii. p. 5. t. 62.

PROVINCIAL.

Spoon-bill Duck.

In the former part of this work we had fallen into the same error

error with many more enlightened naturalists, having stated that the female was not distinguishable by its plumage from the male; but the fact is that the dissimilarity is so great as to have caused the female to be considered a distinct species. As such it has been figured in the *British Miscellany*, under the title above referred to.

Dr. Latham, in his second Supplement to the *General Synopsis*, describes the female to differ in having the head dark-brown, and at the base of the bill a band of white nearly half an inch broad, passing quite round the forehead, cheeks, and throat. Mr. Tunstal and Mr. Boys were both of the same opinion.

In the Catalogue of Sussex birds given by Mr. Markwick in the Fourth Vol. of the *Transactions of the Linnean Society* we find the following correct observation, under the article Scaup Duck:—"On the 27th of January, 1795, my "servant, in company with another person, fired amongst a "flock of these birds consisting of nearly an hundred: he "brought me a male and female; the latter proved to be the "*Anas frœnata* of *Dr. Sparman's Museum Carlsonianum*."

In confirmation of such opinions, we have been fortunate within a few years in obtaining four or five specimens of this White-fronted Duck, by the kind assistance of Mr. Anstice, of Bridgewater, three of which were sent to us alive; one of these now living, has been six years in the menagerie. From the same quarter a live male Scaup has been made the companion of the former for two years, a circumstance that enables us most clearly to decide that they are without doubt both the same species, differing only in sex.

Their manners are similar, as well as the conformation of the several external parts, bill, legs, colour of the eyes, and number of the tail-feathers. They associate together apart from all others, make the same grunting noise, and both have the same singular toss of the head attended with an opening of the bill, which in the spring is continued for a considerable time while swimming, and sporting on the water. This

This singular gesture would be sufficient to identify the species were all other distinctions wanting.

During the summer months, when the larvæ of various insects are to be found in the mud at the bottom of the pond, these birds are continually diving; but they are perfectly contented with barley, and are become so tame as to come to the edge of the water for a bit of bread. Of all the aquatic birds we have had, that have been taken alive from their natural wild habits, none have appeared so familiar as the Scaup; and after feeding a few days with bread soaked in water, they take to eating barley freely.

This species is never taken in a decoy, and rarely observed upon fresh water, except where large rivers disembogue into the sea; or in lakes close to the sea.

The manner in which our specimens were taken was accidentally thus. On some parts of our flat coast where the tide recedes for a considerable distance, the fishermen place their nets in a semicircular form at low water, so that on the return of the water at the next ebb, all the fishes within the vortex of the net are cut off, and with them sometimes a Scaup, or a Scoter. These birds finding some resistance, attempt to avoid the obstacle by diving, and by such continued efforts, are at last incapable of flying, and are easily taken alive, except they get entangled in the net under water, and are drowned, which sometimes happens.

We shall now record a minute description of the female Scaup, and rectify a mistake we had fallen into in the former part of this work, where it is said that the Scaup has sixteen feathers in the tail. This circumstance has since been attended to in both sexes, and ascertained to possess only fourteen.

In point of size the female is not much inferior to the male. The weight of the one under examination is twenty one ounces; length eighteen inches and a half. The bill like that

of

of the male is very broad, a trifle dilating at the end, and from being considerably compressed, appears to reflect a little, and is of a dusky lead-colour, punctured round the nail, which last is black: irides bright yellow: the head is large and well clothed with chocolate-brown feathers, those on the crown longest; round the base of the bill is a band of yellowish-white, occupying the space of half an inch next to the upper mandible, decreasing from thence to the chin: the neck is brown: breast the same, tinged with tawny: upper part of the back dusky, the ends of the feathers greyish: the lower back, and coverts of the wings dusky-black, tinged with changeable green: scapulars the same, minutely speckled with grey, and mixed with some plain dark brown feathers: the four first prime quills dusky-black, the others becoming grey on their outer webs; the ten secondaries are white, with dusky tips; the next is black, speckled with white near the shaft: the tertials are plain dusky-black, slightly bronzed: belly dirty white: sides inclining to brown, darker over the thighs: between the legs, and from thence to the tail, mottled with pale yellowish-brown, the feathers behind the vent finely barred with the same colour: the tail, and the feathers on the rump contiguous dusky-brown, the former rather short and rounded: legs and toes dusky-lead colour, the webs darkest.

We have observed that the females become much more powdered with grey on the back, scapulars, and wing-coverts, with age.

One very fine specimen, much larger than the above, which was captured in the month of May, had the head and neck very full of feathers of a fine chocolate-brown: the breast and round the lower part of the neck behind, of a fine olivaceous-brown; and the two middle feathers of the tail much darker than the rest.

This bird which came alive to us did not appear in health, and had large swellings on the joints of some of the toes, so that

that it could scarcely walk; indeed at best this species is ill calculated for pedestrian excursions. After lingering a few days it died; and upon dissection the ova were found to be numerous, but not much dilated.

The cause of death appeared to be in the lungs, and in the membrane that separates them from the other viscera; this last was much thickened, and all the cavity within was covered with *mucor* or blue mould.

It is a most curious circumstance to find this vegetable production growing within a living animal, and shews that where air is pervious, mould will be found to obtain, if it meets with sufficient moisture, and a place congenial to vegetation. Now the fact is, that the part on which this vegetable was growing was decayed, and had no longer in itself a living principle; the dead part therefore became the proper pabulum of the invisible seeds of the *mucor* transmitted by the air in respiration; and thus nature carries on all her works immutably under every possible variation of circumstance. It would indeed be impossible for such to vegetate on a living body, being incompatible with vitality, and we may be assured that decay must take place before this minute vegetable can make a lodgement to aid in the great change of decomposition. Even with inanimate bodies the appearance of mould or any species of *Fungi* is a sure presage of partial decay and decomposition.

DUCK-TUFTED.

Lath. Syn. Sup. ii. p. 355.—Lin. Trans. iv. p. 117.

Many of this species are shot in fresh water, but it is too great a diver to be taken in the decoy.

It is sometimes destitute of the tuft or pendant crest, and in that case has been made distinct.

Is frequently shot on Slapton Ley in South Devon, a large piece of water close to the sea, and is by the natives called Black-Wigeon.

In

In the month of December, when the aquatic testaceous *Limaces* have retreated under the mud in the deep, we have found this bird with its craw full of *Helix putris*.

DUCK-VELVET.

Lath. Syn. Sup. ii. p. 350.—Lin. Trans. iv. p. 119. t. 15. f. 3—7. (Trachea).

PROVINCIAL.

Double-Scoter. Great-Black-Duck.

DUCK-WHITE-FACED, or WHITE-FRONTED, vide Duck-Scaup, (female)

DUCK-WHITE-THROATED.

In the Second Vol. of the *British Zoology*, Table 98, a figure is given of a black Duck, with the forehead, round the base of the bill, the throat, and part of the neck before white; to which the above title is prefixed without any description or reference whatever. We are however inclined to think it is a variety of the Scoter, having seen a female of that species with a whitish throat. Vide Scoter.

DUCK-WINTER, vide Duck-Pintail.

DUN-CUR, vide Pochard.

DUN-DIVER. Mergus Castor.

Nothing has perplexed us more than the discrepancy of opinion concerning some of the Mergansers; nor can we after so many years indefatigable search for the truth, offer any thing satisfactory from personal observation; but we are induced to continue in our former opinion, that the Dun-diver and Goosander are really distinct, not having heard any thing adduced to alter that opinion. If indeed we are to rely on the transactions of public bodies, we may produce the *Berlin Transactions* as an evidence of the fact. In the

fourth

fourth vol. of that work, tab. 18, fig. 3, is a representation of the *trachea* of the Goosander: and in the third vol. tab. 7, fig. 5, is given the *trachea* of the Dundiver. The difference between these in structure is so material, that they cannot possibly belong to the same species.

These not only differ in the bony labyrinth at the bottom of the *trachea*, but that which belongs to the Goosander has two enlargements about the middle; whereas only one enlargement belongs to the Dundiver.

This should seem to clear up all doubts upon the subject, especially as the birds in question cannot well have been confounded with any other species.

It has been asserted by other naturalists that birds in the plumage of the Dundiver have upon dissection possessed a labyrinth; a conformation peculiar to the masculine gender; but they have not been particular in noticing the distinction between it and that of the Goosander, if such existed. In fact such male Dundivers have been generally considered as birds immature in plumage, and were young Goosanders, wanting only age to perfect them; and probably with that preexisting opinion, proper attention to the enlargements in the middle of the *trachea* was neglected, and the labyrinth only attended to; and as the difference in that part might not be apparent but by comparison, these birds may have been frequently overlooked.

With us, especially in the southern parts of the kingdom these birds are so extremely rare that we never have had the good fortune to dissect a Goosander; and never more than two Dundivers; both of which were females, and their *tracheæ* similar, being small and flattish, without an enlargement of any kind.

From the authority before referred to, we cannot doubt but that the Goosander has two tracheal swellings, and that a bird at least similar to the Dundiver, has but one such enlargement,

the evident distinction of the male sex. We have therefore to learn what are the females to these. Has any Goosander upon dissection proved a female, or been found destitute of the singular tracheal conformation? Or has any Dundiver been observed to possess two tracheal enlargements? These are points in question, for though both sexes of the Dundiver have been noticed, as we are told, no such occurrence has taken place with respect to the Goosander. Admitting therefore that both sexes of the Dundiver are similar, and continue so at all ages, we have yet to discover the female of the Goosander; and we cannot too strongly recommend to our northern scientific friends, a strict attention to this subject.

In the Eighth Vol. of the *Transactions* of the *Linnean Society*, Mr. Simmonds has attempted to prove these birds to be of the same species; but much more is wanting to convince the critical Ornithologist and fix his wavering opinion. But we shall have occasion to say more on this subject under Goosander.

It is, we admit, very possible that an error in our notes may have occurred; but we thought that every possible care had been taken in counting and noting the number of feathers in the tail of the only Dundiver we ever had the means of examining fresh, previously to the publication of the former part of this work. But as Mr. Simmonds remarks that two specimens of both these birds now in Edinburgh, have each eighteen feathers in the tail; and as we have since had a specimen of the Dundiver with a similar number, we conceive we had been deceived.

It should be remarked that in all the Dundivers we have hitherto examined, the shafts of the feathers on the back are black: six of the secondary quills, and their greater coverts, nearly wholly white; and it appears that these are at first of a fine buff colour, for in one wing of a specimen now before us, two of these quills, which are only three parts grown, are of

of that colour: some feathers on the sides of the lower neck, and body, are tipped with buff. The fact is, that newly moulted birds have all the light parts buff, but that colour soon fades and becomes white: the throat and chin of this is ferruginous-white.

Whether the Duudiver feeds in preference on any particular species of fish we have not been able to ascertain; but the bill is most admirably adapted to hold securely the most slippery of the finny tribe.

The upper mandible is furnished with four series of teeth, or processes, inclining backwards, two rows on each side the whole length of the bill, except close to the tip, and here the upper mandible is much hooked, and falls over the point of the lower, and is armed with a strong nail, greatly contributing to the security of its prey. The outer series of teeth in the upper mandible on each side, consists of about thirty. In the lower mandible there is only one series on each side, consisting of about forty; these, when the bill is closed, lock in between the double series in the upper mandible.

DUNLIN. Tringa alpina

Bewick Br. Birds, ii. t. p. 117.

We have had specimens of this bird weighing an ounce and a half.

One shot on the eighth of August had nearly the whole under parts black from the neck. Another killed the third of October had the upper part of the back and scapulars chiefly cinereous, with dusky on the shafts, intermixed with a few black feathers slightly margined with rufous: the head and neck pale, streaked with brown, and nearly destitute of the usual rufous: the breast and belly having some black spots betrayed the species, but the spots were small and not confluent: the tail as usual.

The former of these is evidently an old bird; the latter a young one, evinced by the mottled appearance; changing from the cinereous nestling feathers, to the dark adult plumage.

A specimen shot in July was extremely rufous on all the upper parts, especially on the head and neck.

From the appearance of these birds at different seasons, it should seem, that their first feathers which are pale, and mixed with cinereous, change, and are supplied before Christmas by those dark ones which constitute maturity; after which as the summer advances, the rufous becomes conspicuous; but this last is not effected by change of feather, but the colour is turned by long exposure to the sun and weather, a circumstance not uncommon towards the latter end of summer, when even the quills of some dark birds, lose their original black or brown, and become tawny.

Mr. Simmonds says (*Linnean Transactions*, vol. 8. p. 266). "that the nest is composed of dried tufts of *Juncus squarrosus*, and the eggs four, smoky-white, irregularly marked with light and darker-brown blotches,, rather more distant and paler at the smaller end.

Breeds in company with *Charadrius hiaticula* and *Tringa Vanellus*, in the islands of South Ronaldsha and Sanda, and at Loch Strathbey, near Frazerburgh, Aberdeenshire.

DUNTUR, or Dunter-Duck, vide Duck-Eider.

EAGLE-CINEREOUS. Falco albicilla
Lath. Syn. Sup. ii. p. 18.
Shaw. Gen. Zool. vii. p. 79.

We refer to the second Supplement to the *General Synopsis* with some doubt, for what Doctor Latham has considered as a variety of this species, inhabiting New Holland.

The

The bill and legs black, general colour of the plumage deep brown, but the under parts are much paler, and the wings much darker than the rest: the rump and tail very pale ash colour, nearly white.

If this is one of the variations caused by climate, we may certainly as readily conceive that the Bald or White-headed Eagle is also a variety.

The specimen mentioned in the former part of this work, which we had alive, died in the spring of the year 1806, having lived with us nearly seven years, and two years before that with Mr. Den. The disease which occasioned his death was in the gall-bladder.

During the time he was in our possession, no material change in plumage was apparent, except that the tail feathers which at first had the outer webs sprinkled with dusky, became more white, the outer feather only having a little of such mark; but the base of the tail is still dusky-black for about one third of its length.

As we suspected, this bird proved upon dissection to be a male; and was in good condition, and beautiful plumage; and now occupies a place in our museum.

His weight was seven pounds six ounces: length two feet eight inches and a half: breadth six feet ten and a half.

The bill and cere yellow: irides pale yellow: the space between the bill and eye apparently bare, but on nice inspection is found to be covered with very short hairs; this is of a blueish-grey colour: the head and neck pale cinereous-brown: the body is a mixture of brown and cinereous, the new feathers being dusky-brown with a cinereous tinge; the old ones cinereous-brown with a rufous tinge: the upper and under tail-coverts, and thighs, are darker than any other parts except the base of the tail, and quill feathers; the former is dusky-black for about one third of their length next to the body; the quills are dusky with a shade of cinereous above,

the under part variable as the light falls upon it, or changeable from brown to cinereous-lead-colour, and rufous-brown towards the tips: the legs as usual yellow.

This bird did not appear to be particularly partial to fish, but devoured flesh with equal avidity. He usually plucked birds pretty clean of their feathers before he devoured them, and those unavoidably swallowed, were, with a part of the bones disgorged. He drank more frequently than usual with this tribe of birds. He was not a bold bird, but fearful of strangers, and in his violent struggles, often broke his chain; and two or three times fled for a mile or more; but this being an exertion to which he was unaccustomed, was recaptured without much difficulty.

EAGLE-GOLDEN. Falco Chrysaetos.
Shaw. Zool. Lect. i. t. 52.
Gen. Zool. vii. p. 75. t. 17.
Bewick Br. Birds. i. t. p. 5.

We have been told that this species breeds in Scotland, and in Ireland, but we are inclined to believe it is much more rare in the British dominions than generally supposed; for we know that almost every large eagle, especially of the species *Ossifragus* or Sea Eagle, is, by the captor and his neighbours, considered at once to be the *Eagle of the Sun*, the only one particularized in ancient history, or that is recorded in sacred writings. Unless therefore such birds fall into the hands of the scientific naturalist, little is to be depended upon.

We have had two or three specimens of *Ossifraga* sent to us for the *Chrysaetos*.

Mr. Bewick says a Golden Eagle was shot near Warkworth which measured eleven feet and a quarter in the extent of wings.

It has not been our good fortune to meet with one out of the many reputed Golden species that have been shot in England;

England; nor have we ever seen this bird in any British collection, except in that which was once as much an honor to the country, as its recent dispersion is a disgrace. When we reflect on the various detections of peculation to a vast amount by public characters; when public bodies can, by application to parliament, procure loans to any amount, and private individuals be rewarded from the public fund, how extraordinary does it appear that in neither of the houses of parliament an advocate, or a champion should be found ready to stand forth and rescue science in so enlightened a country. It will scarcely be credited in after ages, when our children's children shall be told of the polish and refinement of the present day; that the trifling sum of thirty, or perhaps twenty thousand pounds, would have added that vast assemblage of nature and art to the British Museum; yet it was suffered to be dispersed.

Had the *Leverian Museum* been connected with that of *British*, these collectively would have formed a most magnificent national collection that might have been envied by surrounding potentates, but unrivalled even by that of the *Great Nation*, (to which the fate of war has given the means of plundering from the public and private museums of nearly the whole of Europe) but alas! that unfortunate collection has been dissolved. "and like the baseless fabrick of a vision, has not left a wreck behind."

The scientific reader will pardon this digression, and sympathise with us on the fate of that once entertaining and highly instructive assemblage, both natural and artificial, collected from every part of the globe. At its dissolution the *Austrian cabinet* was enriched by means of a special scientific messenger expressly sent by its august sovereign, and some of the choicest and most valuable articles, were probably at the capture of *Vienna*, transferred to the *Parisian museum*.

EAGLE-RING-TAIL. Falco fulvus.

Bewick Br. Birds, i. t. p. 7.

Shaw. Gen. Zool. vii. p. 71.

Mr. Pennant, in his *Voyage to the Hebrides*, says that, in the isle of Rum, the Ringtail Eagles have reduced the stags very much.

The legs of this species like the Golden, being covered with short feathers down to the toes, is one of its essential characters.

The Ringtail Eagle does not appear to be so plentiful even in North Britain as the Sea Eagle, and probably is confined to the Highlands of Scotland, where it usually breeds in the most inaccessible parts of the mountainous cliffs; sometimes on that stupendous mountain so well known to all the northern tourists, Ben-Lomond.

Upon the summit of that mountain an Eagles egg was found amongst the rocks, without any nest, supposed to belong to this species, and which must have been prematurely dropped.

As we were sporting in the neighbourhood of *Ben-Lomond*, on the summit of the lesser mountains that form its base, a Grous (*Tetrao Scoticus*) was wounded, and flew with difficulty eighty or an hundred paces. An Eagle apparently of this species perceiving the laborious flight of the Grous, descended with rapid wing from the adjacent lofty cliffs, before our guns were reloaded, and in defiance of the shouts made to deter him, carried off his prey.

In another part of the Western Highlands of Scotland, we had an opportunity of witnessing the powers of the flight of this bird in pursuit of its quarry. An old Black-Cock (*Tetrao Tetrix*) was sprung, and was instantly pursued by the Eagle, (who must have been on a neighbouring rock unperceived) across the glen, the breadth of which was

at

at least two miles. The Eagle made several pounces in view, without success, but as there was no wood, nor cover on the opposite mountain sufficient to conceal so large a bird as the Heath Grous so closely pursued, he doubtless forfeited his life to the merciless tyrant of the rocks.

The Rev. Mr. Fleming (who had an opportunity of observing these birds in Zetland) informs us they are general depredators, and in the breeding season rob the rock birds of their young, especially Gulls and Corvorants.

EAGLE-SEA. Falco ossifragus.
Bewick Br. Birds, i. t. p. 11.
Shaw. Gen. Zool. vii. p. 81. t. 18.

The contest between birds of prey in the season of love is sometimes extremely desperate, and not unfrequently fatal.

Two of this species contending in the air over the extensive lake Loch Lomond in the Scottish Highlands, both at last became so firmly grappled to each other by their talons, that they were precipitated into the water. The uppermost regained the power of its wings, but the other was taken alive by a Highlander who witnessed the scene, and who waited till the wind had wafted him near the shore. This curious circumstance we received from an officer who bought the Eagle.

Although this is an extremely bold bird, it will not venture to contend with a Dog or a Fox in its natural wild state.

An Eagle and a Fox were observed to be regaling themselves on the carcase of a Goat that had fallen down a precipice in the Highlands of Scotland. The latter frequently obliged the other to desist, and retreat a little, but it was not sufficiently alarmed to prevent returning; and it occasionally threw itself into bold and picturesque attitudes of defence, spreading the wings and tail, and erecting every feather.

Two

Two living Eagles were sent to us from Ireland, and were on their arrival at Bristol detained by an officer of excise, upon a plea that there was a duty upon all singing-birds. Had this happened on the other side of the water it might have been termed an Irish story. The unfortunate birds would however have been starved at the Custom-house if application had not been made to the head of that department in the port of Bristol, offering to pay any demand for their release, if legally detained for their vocal abilities. By this officer it was most wisely determined, after some consideration, that Eagles could scarcely be considered as singing birds.

This is by far the most plentiful of the Aquiline race in the British dominions; not a year passes but many are shot in England.

A specimen killed on the Mendip hills in Somersetshire two years since, was very small, probably a male. Its talons were blunt as if worn in confinement.

This bird was very dark about the head and neck, but the greater coverts and scapulars were brown, with a rufous tinge, their tips dusky: the tail feathers dirty-white on the inner webs much sprinkled with small dusky spots, the shafts whitish, and the outer webs like the quills, dusky-black. The length was less than three feet; and the breadth about six.

ERN.

This name does not appear to be confined to the Cinereous Eagle, as we are informed that the Golden, as well as the Black Eagle, and the Osprey, have this title applied to them in the Orknies.

FALCON.

This genus like some others, has been nominally thrown into two divisions the Aquiline or Eagles, and the Accipitrine or Hawks, differing however in nothing but size. Some of

of the former have been trained to falconry, but are too heavy to be carried on the fist, not so manageable as the larger Hawks, and not so well calculated for flying at feather.

The Hawks, and Falcons as they are generally termed by the falconer, are numerous; but as the gun has superseded the princely diversion of hawking, it is extremely difficult to trace from the epithets of falconers what species, ornithologically speaking, have been trained.

We are assured our British ancestors made use of four species, the names of which we cannot apply at present: the *Hebog* or Hawk, the *Gwalch* or Falcon, the *Hwyedig* or long-winged, the *Camming* or crooked-bill. To these may be added some falconers names of modern date, such as *Tercel, Red-Falcon, Gentle-Hawk.*

These are spoken of in *Thornton's Sporting Tour.* A cast of Hawks and a *Tercel*, sent to him from Lochaber, p. 74. *Red-Falcons* and *Red-Tercels*, p. 80.

It should appear that the term Gentle is not a specific name, but a term given in the language of falconry to such as are *manny* or manageable. Vide Falcon perigrine.

Cuvier has divided this genus into ignoble and noble birds of prey, and these are again subdivided according to the length of their wings and legs, curviture and notches in the bill, and other circumstances of less importance.

We do not perceive any advantage resulting from the numerous divisions formed by this naturalist.

Amongst the ignoble are placed the Eagles, Fishing Eagles, Eglets, Eagle-hawks, Goshawks, and Sparrow-hawks, Buzzards, Busards, and Kites.

These we are told are never employed in falconry, so that we must either conclude this writer has also separated the synonyms hawking and falconry, or he must be mistaken; for not only the Goshawk has been in high estimation with falconers,

falconers, but that some species of Eagles have been trained to the flight with advantage.

The Falcons which Cuvier has properly termed the *noble* birds of prey, are tolerably well defined by the second feather in the wing being the longest; but all such have not the process or tooth on each side the upper mandible, as may be observed in the Rough-legged Falcon. And in the *ignoble* division, which is said to have no such dentation on the bill, the Sparrow Hawk is a proof to the contrary.

There appears to be a strong division between the Buzzards, the Hawks, and the Falcons; and the Kites may be separated by their forked tail; but it is extremely difficult to determine the division of the Eagle from the Buzzard, as size alone constitutes the chief distinction. The Osprey has been called both Eagle and Buzzard: this belongs to Cuvier's division of Fishing Eagles, and possesses individually a remarkable character, that of the outer talon being nearly as large as the inner; but this is probably a specific distinction, as no notice is taken of it in the divisional characters of that writer.

We shall not enter further on this new arrangement at present, as we do not conceive it will enlighten our English readers.

FALCON-ASH-COLOURED. Falco cinerarius. Orn. Dict. Ash-coloured Falcon, Lin. Trans. ix. p. 188.

Much new light has been thrown upon the natural history of this bird since the publication of the former part of this work, which has been honored with a place in the *Transactions* of the *Linnean Society*. The subject however has grown upon us since; the nest has been taken, and the young ascertained, so that little remains to make the history of this species complete.

We

Ash-coloured Falcon

We shall first extract a part of the account given in the *Linnean Transactions*, as that work may not be in the hands of every ornithologist, and afterwards detail our subsequent observations.

By the examination of a recent specimen of this bird, killed on the 10th of August, 1803, near Kingsbridge, in Devonshire, we are enabled to add somewhat to the description of it, and to correct a mistake in the former part of this work, where it is stated that the greater coverts have dusky-black on the outer webs towards their middle, forming a small bar; whereas it will now be observed, this visible mark when the wings are closed, is on the secondary quills, and not on the coverts.

The specimen in question weighed nine ounces and three-quarters: length eighteen inches: breadth three feet eight inches and a half: the length from the elbow to the end of the third quill feather (which is the longest) fifteen inches and a half: length of the tail, from the gland on the rump, nine inches and a half. Bill black, the base and cere greenish: irides and orbits bright yellow: crown of the head, cheeks, throat, under part of the neck, back, and scapulars cinereous-brown; the feathers of the last are cinereous at their base, with the tips brown: the smaller coverts are marked the same as the scapulars: the greater coverts are also cinereous-brown, the exposed part of each feather darkest, but not tipped like the others: the eight prime quills are dusky-black, the last with a dash of cinereous; the first is very short, the third by far the longest: secondary quills cinereous-brown above, pale beneath, with three remarkable dusky bars, transversely placed, and nearly in parallel lines, each half an inch in breadth; in some of these feathers when separated from the wing, the rudiment of a fourth bar is observable at the base; but of these three or four bars, only one is visible on the upper side of the wing, the others being hid

hid by the coverts; this is about two inches from the tips of the feathers; on the under part of the wing two bars are very conspicuous the others are paler and hidden by the smaller under coverts, the first row of which is white, with a large dusky bar across the middle; the rest are bright bay, more or less spotted, barred, or margined with white: the under parts of the body, including the under tail-coverts and thighs, white, with a broad streak of bright bay down the shaft of each feather: under scapulars with broad alternate bars of bay and white: the tail is a trifle cuneiform, the two middle feathers dusky-brown, the rest dark ash-colour, palest on the two or three outer feathers, which have their inner webs approaching to white; all except the two middle feathers have five equidistant bars on the inner web taking in the shaft; these bars on the two outer feathers are bay, the rest more or less dusky, with a ferruginous tinge on those at the base: legs orange-yellow, rather long and slender: claws small, and black.

The bird from which this description is taken is a male, proved to be so by the unerring rule of dissection. It has the feathers behind the ears short, but no ruff continued round the head so conspicuous as in the Hen-Harrier. He was in good condition, and in his stomach was a Sky-Lark, and yet his weight was not so much as that of the Hen-Harrier by three or four ounces; though his length and breadth are much superior, by reason of his longer wings and tail. It must also be remarked that, he cannot be a young bird, as some of the quills are moulting; the first and second feathers of the secondary quills in each wing are not full grown, but are of the same colour as the rest, and possess the same bars.

When this account was laid before the *Linnean Society*, we were unable to say any thing of the *habitat*, or to determine whether this bird was really indigenous or not; but we have been fortunate enough since to remove the greater part

part of the veil that hid in obscurity the history of this species.

On the 23d of May, in the year 1808, we observed one of these birds in South Devon, skimming over a patch of furze very near; and noticed that it repeatedly dropped into the same spot, after having pitched on the bare ground at some distance; but could not observe whether it was preparing a nest or not. At the same time we noticed a large brown Hawk floating over another piece of furze at a little distance. This had much the appearance of the Ringtail, but appeared longer in the wings, which gave a suspicion that these were actually the two sexes of the Ash-coloured-Falcon; and which seems to be confirmed by subsequent events.

Mr. Tucker (the author of *Ornithologia Danmoniensis*) while looking over our museum, had this bird pointed out to him, and was asked if he had ever seen it. To which he replied that he thought he had, but had probably mistaken it for a variety of the Hen-Harrier. In a short time after Mr. Tucker sent us one of the secondary quill feathers of this bird, which was then in his possession, and informed us that both sexes of this species were shot in that summer (1808) from the nest, by the Game-keeper of Mr. Templer, of Stover, in Devonshire, and that three young ones were also taken at the same time. All these had been nailed up against the garden wall, and were considered as the Hen-Harrier, with his female the Ringtail, and their offspring; the male of which had been previously taken down by Mr. Tucker as a variety of the Hen-Harrier, before we had pointed out to him the distinction.

It would have been a most desirable object to have obtained the female, but unfortunately we were too late; it was totally destroyed. There was however no longer any doubt that the colour of that sex was brown, not very unlike the

the general appearance of the Ringtail, having been taken for such by Mr. Tucker upon a cursory view, when he took down the male.

But it is singularly fortunate that in the same year Mr. Tucker should himself take a nest of this obscure species with young, which he attempted to rear, under the idea that they were Hen-Harriers.

The nest was discovered in the month of July, on the ground, amongst furze, containing three young birds and an addled egg, which last was white. Two of the young Hawks continued alive till the summer of the following year, and were evidently from their disproportionate size, of different sexes. About the beginning of August they began to moult, plainly discovering that they were not Hen-Harriers as before suspected, but actually the birds in question. Unfortunately at this most interesting conjuncture, the female made her escape before she had nearly completed her mature plumage, and the only part we could obtain of her was an outer feather of the tail that had been broken off, and was evidently of recent growth by not being completely expanded at the base: This feather has five bars of ferruginous, with alternate rufous-white on both webs; towards the end, the dark bars incline to dusky.

In the latter end of November the male was by some accident killed in the middle of his moulting, when assuming the feathers of maturity; and was in a mutilated state sent to us for examination; the description of which is as follows.

The head, neck, part of the scapulars, and most of the lesser coverts of the wings, still possess the nestling brown feathers, which are similar to those of the immatured male Hen-Harrier, or the adult Ringtail; but the ferruginous-brown is brighter, and more inclining to dull orange: all the smaller feathers upon the under part of the wings are bright ferruginous, differing most essentially in colour from that

part

part of the Hen-Harrier of either sex, or in any state of change, and which in the adult male of that species is invariably white. The under scapulars on one side are similar to those of the adult, elegantly barred ferruginous and white; but on the other side these feathers have not been changed, and are plain ferruginous: the under parts of the body and thighs are nearly matured, being white and possessing the bright ferruginous streaks down the shafts of the feathers: the quills, and the greater coverts, are mostly matured, but a few of the nestling feathers remain, which strongly, and most interestingly mark the distinction, particularly two or three of the secondaries, which are destitute of the dusky bars, and are of an uniform chocolate-brown, darker than those on the young Hen-Harrier: the tail is much mutilated, but the remains of the old feathers are in appearance barred much like those of the adult; the outer feathers with bright ferruginous and white, the others with ferruginous bars at the base; but the third feather is new, and nearly full grown, on which there are five dark, and five pale bars alternate; the three lower dark bars mixed with ferruginous, the other two are dusky, and the light bars which are white at the base, become cinereous towards the end, and the point, with the margin of the outer web, are also cinereous: the greater coverts of the tail are white, similar to those of the Ringtail, or young Hen-Harrier, but tipped with cinereous.

The premature loss of these young Hawks was rather unfortunate; however, little more could have been attained by them, since enough had been observed of the change of the female to shew there was little or no alteration in the markings of the plumage; and it had been seen that both sexes were similar in their first feathers. But to put the matter beyond all doubt, another nest was found by Mr. Tucker in the following summer, very near the place where the young had been taken the preceding year; in which there were also

three young birds and an addled egg. The nest was placed, like the last, amongst furze, upon a hill near Ashburton; from which two young ones were taken, and the female shot. The latter we had not an opportunity of examining, so that the exact weight and measurement were not ascertained; but with regard to plumage, we were informed that no difference existed between the female and the two young birds, which last were only known to be of different sexes by the superior size of the female, and by the tint of the irides, which in that sex are at first dusky, but in the male are of a pale colour. The colour therefore of these Hawks in their first plumage, like the Hen-Harrier, exactly resembles the female till after the first moulting, and therefore cannot in any of its changes be mistaken for either sex of that bird, now the complete description of this species is obtained in both its primary and adult plumage. Upon the authority of Mr. Tucker we shall consider the plumage of the adult female to be exactly similar to that of the young, and shall therefore substitute a description taken from a young male on the 14th of November, with which bird, alive, Mr. Tucker favoured us, having been taken from the nest about five months.

The bill dusky: cere yellow: irides so pale a yellow as to appear nearly white. The whole upper part of the head ferruginous, with small dusky spots; on the hind head, and nape, a broken patch of white; immediately above and beneath the eye is a pale streak; the coverts of the ears, extending down to the lower mandible is dark chocolate-brown: the feathers on the whole upper parts of the body including the scapulars are dark chocolate-brown: the quills the same; the first three or four pale ferruginous about the middle of the inner web; the secondary quills the darkest, and all more or less tipped with ferruginous, except on the upper part of the back; and those on the back of the neck are deeply margined with that colour: the lower part of the rump, and coverts of the tail,

white,

white, with a few streaks of bright ferruginous: the lesser coverts of the wings are deeply margined with ferruginous: the chin is dusky-brown: the whole under parts, from chin to vent, including the thighs, under tail-coverts, and under coverts of the wings, bright ferruginous without spot, except the shafts being somewhat darker, appearing on close inspection like fine slender streaks: the tail feathers have five alternate darker, and five paler bars, but the upper ones are nearly obsolete; these bars on the outer feather are bright ferruginous and white, with one bar near the end darker; the second is similar, but has the ferruginous bars inclining to chocolate-brown, and the white ones run into pale ferruginous on the outer webs; the three next become gradually darker, with the pale bars less conspicuous, and more ferruginous than white; the two middle feathers have the bars marked only by a shade of difference in colour, and are scarcely defined.

We have been particular in describing this bird in all its stages, in order that it may no longer be confounded with the Hen-Harrier or Ringtail; and after what has been said, it is hardly necessary to remark that the bright ferruginous colour of the markings is always sufficient to discriminate this. In the adult male, these bright markings on the under parts of the body, and under the wings, and the black bars on the secondary quills (independent of the great difference in the tail,) at once point out the distinction from the male Hen-Harrier. In the female, the uniform ferruginous colour of all the under parts is sufficient to discriminate it from the female Hen-Harrier, besides the colours being much brighter: and in the adolescent or changing state of plumage, the same difference exists in markings.

That this bird has been long known, and confounded with the Hen-Harrier, there can be no doubt, a proof of which is evident by the description of what Mr. Pennant supposed a variety of the Ringtail. In describing that bird "the breast

and belly, (says Mr. Pennant) are of a yellowish-brown, with a cast of red, and marked with oblong dusky spots, but they are subject to vary, for we have met with one specimen that had these parts entirely plain."

Here then is an excellent definition of the distinction of the females of the two species, or of the young of both sexes before the first moulting: and, except this remark of Mr. Pennant, we do not find any description, that sufficiently accords with either sex of our Ash-coloured Falcon, to refer to with confidence.

We originally referred with doubt to the Winter Falcon of the *Arctic Zoology;* but unless climate is admitted to make a strange difference in plumage, our doubts are more magnified since we became better acquainted with this species: by its description it differs as much from one sex of the Ash-coloured Falcon as from the other.

From the Northern Falcon, this also differs in some essential points, especially in the under tail coverts, which in that, is said to be plain white, whereas in ours, the adult male (to which only that can be referred) has those feathers white streaked with ferruginous. Dr. Latham, who first described the Northern Falcon as a native of North America, says the under parts are ferruginous-brown with interrupted bars of white: "these bars (says the Doctor) are produced from each feather being of this ferruginous colour, with two or three spots of white on each side the shaft." This is not similar to the markings of our bird, in which the feathers of that part, that is from the lower breast to the tail, are white, with a bright ferruginous streak down the middle of each. With such a material difference, we must still have very great doubts of their being the same species.

Another bird given by Daudin, under the title of *Faucon á croupion blanc* has been described in the second Supplement to the *General Synopsis of Birds* as a variety of the Northern Falcon;

Falcon; but this in markings is farther removed from our species, by the neck and breast being more or less ferruginous mixed with white: the belly and thighs are also white, having two or three heart-shaped spots of ferruginous on each feather. This may be a variety of the Northern Falcon, but does not better accord with our bird than the former: upon the whole, therefore we are inclined to believe our Ash-coloured Falcon has not hitherto been described as a distinct species, and that both sexes have been confounded with those of the Hen-Harrier, unless *Falco spadiceus* of Mr. Foster, described in *Phil. Trans.* lxii. p. 383, belongs to it. The description states it to be very like the Moor Buzzard, only less, and wanting the light spot on the head. The female of our bird is in general appearance more like the Moor Buzzard than any other species of Falcon with which we are acquainted, especially in having the under parts immaculate, but its colours are brighter, and the bird is not near so large. If, however, the *spadiceus* is the same as the Chocolate Falcon of the *Arctic Zoology*, it cannot be our bird, as that has its legs covered with feathers.

Whether the Ash-coloured Falcon remains with us the whole year has not been ascertained, but upon recurrence to notes we think not one has been seen by us later than October.

FALCON-DOVE-COLOURED. Vide Hen-Harrier.

FALCON-GENTIL.

Shaw. Zool. vii. p. 122.

Doctor Latham in his Second Supplement to the *General Synopsis* of *Birds* says, "The young of the Goshawk is very "different from the adult, and it is not at all clear that the "Falcon Gentil of the *British Zoology*, No. 50, is not the "Goshawk in its first feathers." To this opinion we most heartily subscribe.

Gentil

Gentil or Gentle in Falconry does not appear to be a specific name of any particular Hawk, but is applied to such as are docile, and completely manned for the sports of the field. Colonel Thornton, whose knowledge on the subject no one will dispute, assures us that the term frequently used in his *Sporting Tour* to the Highlands of Scotland, applies to the Peregrine Falcon: Vide that bird.

Buffon considered the Gentil Falcon as the common Falcon in full plumage: Monsieur Daudin on the contrary maintains that it is perfectly distinct; but allows that falconers give this title also to the common Falcon when completely trained, and in full plumage. Dr. Shaw says he has heard it maintained, on the faith of an eminent Falconer, that the Falcon Gentil is in reality no other than a young or incomplete Goshawk. The two figures given by Mr. Pennant in the *British Zoology* have short wings like the Goshawk, and not like the true Falcon; and as he asserts it to inhabit Scotland, where the Goshawk is known to breed, we really believe at any rate that Mr. Pennant's Falcon Gentil is in fact that bird.

FALCON-JER. Falco islandicus.
Shaw. Zool. vii. p. 120.

This species, still in use amongst the continental falconers, has also been in training in this country at no very distant date. The Icelanderkin, mentioned in *Thornton's Sporting Tour*, p. 37, is certainly of this species. This author observes, that it is a species of falcon taken only in Iceland, and informs us that one which was blown to sea, and taken in Davis's Straits, was sent to him.

In the collection of Mr. Comyns, is a bird which appears to be a variety of this species. It is white, with a few scattered spots of dusky-black on the upper part of the body, and the head streaked the same; the wings and tail black, the latter

latter with a band of white at the end, and a little white at the base; the quills slightly tipped with white: the secondary quills and under coverts elegantly barred with black and white.

The wings are short for the proportion of the bird; for if the primary quills had been closed, they would certainly not have reached near the end of the tail.

FALCON-PEREGRINE. Falco peregrinus.
Shaw. Zool. vii. p. 128.

A male peregrine, which had ravaged a farm-yard in the neighbourhood, and depredated largely amongst domestic poultry, was at last caught in a trap. His length was sixteen inches and a half; breadth about thirty-seven.

The bill is blueish-black, at the base yellowish; gape and cere yellow: irides dusky: a large space round the eye bare of feathers, pale yellow: the whole upper parts of the plumage dusky-black, with a cinereous dash; the shafts of the feathers black, and the margins slightly edged with ferruginous brown; the forehead pale; back and sides of the neck mixed with yellowish white; behind the eye a black patch; from the corner of the mouth a broad black streak pointing downwards: chin ferruginous white; the whole under parts the same, with a broad streak of dusky-black down the shafts, less conspicuous on the throat and vent: under and upper tail-coverts barred with dusky and ferruginous-white, the former dashed with cinereous: quill feathers dusky black, dashed with cinereous, the inner webs with transverse oblong spots of ferruginous-white: the under coverts of the wings alternately barred black and white: tail dusky-black, dashed with cinereous, with eight pale ferruginous bars, least conspicuous on the outer webs of the exterior feathers; one of the bars constitutes the extremity.

It is remarkable, that the male bird here described, after having been kept for some time, died of a stoppage; a pellet of

of wool (which is usually disgorged,) having passed the stomach, had got into the colon, and could not be evacuated.

The bill and talons of this species are remarkably strong; the former is much hooked, and furnished with a tooth-like process on each side the upper mandible near the tip, and a corresponding notch in the under mandible, which enables it to cut and tear its prey the more easily.

The wing is very pointed, the second feather being the longest, the first not much inferior. The tail is rather short, so that the wings, when closed, reach very near the end: legs short, strong, pale yellow: the toes long, furnished with a projecting callous beneath, at the second joint. It should however be remarked, that the legs are sometimes of a blueish-grey: such occurred to us in one out of three taken from the same nest.

We have been thus particular in the description of this species, because the genus Falcon appears to run into so many varieties as to have caused great perplexity.

If we are to give implicit credit to Monsieur Daudin concerning the common Falcon, *Falco communis*, the varieties of that species are innumerable, and are as dissimilar in plumage as possible; so much, that many of the supposed varieties have by other authors been considered as distinct. Thus we find the White-headed, the White, the Black, the Brown, the Reddish, the Italian, the Sacre, and the Spotted Falcons, are all considered as varieties of that one species: the last of these is the spotted Falcon of the *British Zoology*.

Now as there is no difference in size between the Common Falcon and the Peregrine, nor does there appear to be any essential distinction in the conformation of the different parts; and from what may be collected from authors (who must have frequently seen the former on the continent, where it has been used for falconry, and, as its trivial name imports, must

must be common), there is not a material difference in the plumage from that of the Peregrine, in the first, or perhaps second year; we are not quite satisfied that these birds are not actually the same species, or so nearly allied as to be frequently confounded. In such an opinion we are not perhaps singular; and certainly the variety is not so strained as we have before noticed. The bill, cere, and legs, are the same; the dark patch on the cheek is similar; the general brown, or dusky brown plumage, with rufous edges to the feathers, and the tail barred with alternate dark and light brown, comes so near to the young of the Peregrine, that we cannot help expressing doubts. As to the varieties enumerated, most of them must be merely accidental, and if these two birds are not the same, then who will determine to which species these varieties belong?

In the more northern parts of Europe, the Falcon tribe, as well as some others, are subject to vary towards white, more or less, but this is not perceived in our temperate climate; nor have we in any instance seen any material variation in the plumage of the Peregrine in this country, so as to cause the smallest hesitation in declaring the species.

The Peregrine Falcon, from its nature, is limited to certain districts, for it inhabits only the mountainous parts, or where it can settle in security upon the shelving rocks of some stupendous cliff. With us therefore it is chiefly confined to the bold and rocky parts of our coast, where it breeds, not only in security, but in the midst of plenty. From its habits, therefore, it appears to be less common than it really is; for in fact it is nearly as plentiful a species as any in England, one or two of the commonest sorts excepted; there is not any part of our coast, from north to south, where the cliffs rise to the height of three or four hundred feet, but they are found scattered in the breeding season; and from which they seldom retire, except for occasional migratory purposes, or when the young are driven to seek fresh quarters.

This

This species, therefore, is well known to the Ornithologists of this country, and makes a part in every collection of British birds, and yet the *Falco communis*, which is said to be not less rare in France and Germany, does not appear to have ever been identified in Great Britain.

Doctor Shaw, in his *General Zoology*, vol. vii. p. 129, has given the Barbary Falcon as a variety of the Peregrine ; and in the following page the Lanner stands also as another variety. We refer to that work for the opinion of the author, with whom we are inclined to join, that those birds are in fact only varieties of the Peregrine ; at least the bird described in the *British Zoology*, under the title of Lanner ; and whether there may be any such bird specifically distinct is to be doubted. It must, however, be admitted, that the knowledge of many of these birds is in great obscurity, and no recent light has been thrown upon the subject.

Mr. Pennant remarks, that the rock of Llandidno, in Caernarvonshire, was celebrated for producing a generous breed in the days of falconry.

In more recent days, the stupendous rock on which the castle of Dunbarton, in Scotland, stands, has been famous for a good breed of the Peregrine Falcon; from whence Lord Eglintoun obtained his Hawks for falconry. This Nobleman (whose excessive partiality for the sports of the field, and tenacity of his game, was the cause of his premature dissolution) was, we believe, then Governor of Dunbarton Castle ; in consequence, the Peregrine Falcon was suffered to breed annually on the rock.

We happened to be in the neighbourhood of Dunbarton one summer, when the young were unmolested, and had an opportunity of examining the larder of these general depredators, which might have supplied a luxurious table, though not perhaps equal to that of the Bishop's of Gevaudan, from the eyry of the Ring-tailed Eagle, transcribed into the *General Zoology*, from the life of De Thou.

From one point of the summit of the rock, the Falcon's nest was visible, placed on a projecting ledge, and near the young were several Heath Poults, Red Grous, and other birds.

It is natural to conceive that every falconer was partial to his own breed, and that caprice alone constituted individual excellence: but we are assured by Colonel Thornton that he never could obtain a *Tercel* (a male) that would kill Ducks, but from Hambledon, in Yorkshire, although he had procured many from other places. From the same source we have also been favoured with the following observations.

The female Peregrine Falcon, in the terms of falconry, is always called *Falcon*, whereas the male is denominated *Tercel*. The former is a match for Heron, and Geese, and will fly at lesser game equally well; and where perseverance is requisite, she excels the *Tercel*; but when flown at Snipes is apt to carry them off; and when fed on them, difficult to catch; with care, however, the Colonel assures us, he has found them faultless.

The female, when a yearling, is termed a *Red Falcon*, and the male a *Red Tercel*; and when thoroughly docile, are called *Gentil* or *Gentle Hawks*.

The rapidity with which a Falcon flies in pursuit of its quarry is inconceivably great.

"The flight of a strong Falcon (says Doctor Shaw) is "wonderfully swift. It is recorded, that a falcon belonging "to a Duke of Cleve, flew out of Westphalia into Prussia in "one day; and in the county of Norfolk, a Hawk has made "a flight at a Woodcock near thirty miles in an hour."

But what are these to be compared to the actual velocity and continuance of the flight of a Falcon that is recorded to have belonged to Henry IV, King of France, which escaped from Fontainbleau, and in 24 hours after was found in Malta a space computed to be not less than 1350 miles; a velocity equal

equal to 57 miles an hour, supposing the Hawk to have been on wing the whole time. But as such birds never fly by night, and allowing the day to be at the longest, or to be 18 hours light, this would make 75 miles an hour. It is probable, however, that he neither had so many hours of light in the 24 to perform the journey, nor that he was retaken the moment of his arrival, so that we may fairly conclude much less time was occupied in performing that distant flight.

Those who have attended to the flight of birds, know that a sparrow will fly at the rate of more than thirty miles in an hour. It is indeed extremely difficult to ascertain the actual distance a Falcon may fly in a given space of time when in pursuit of its quarry. But Colonel Thornton, speaking of the rapidity of the flight of a Falcon in pursuit of a Snipe, estimates the space of nine miles in eleven minutes, independent of the numerous turns; and the force with which they strike, in the utmost of their velocity, is so great, that the Colonel has known a Hawk belonging to him cut a Snipe in two parts.

The rapidity with which a Hawk, and many other birds, occasionally fly, is probably not less than at the rate of 150 miles an hour, when either pursued or pursuing, and their powers fully exerted; and certainly 100 miles is not beyond a fair computation for migratory continuance, not only of the Hawk, but of the Woodcock, Snipe, and other similar birds.

The Eider Duck's usual flight has been ascertained to be at the rate of 90 miles an hour, as before stated in the history of that bird.

Amongst quadrupeds, the Horse is perhaps as fleet as any, and yet the velocity falls very short of that of a bird; the famous racer *Hambletonian* covered a space of four miles in eight minutes, which is but 30 miles in an hour, if it could be continued. *Eclipse* is said to have gone at the rate of a mile in a minute for a very short distance.

The

The velocity of the motion of fishes, is not perhaps equal to that of quadrupeds, but can be continued. The Whale has been calculated by Cepede to swim at the rate of 33 feet in a second, which is about 22 miles an hour; and if continued he might circumnavigate the globe at the equator in about 46 days, including nights: whereas a bird, at the rate of 100 miles an hour, would effect the same distance in 10 days and 10 hours. How admirably then is the feathered tribe calculated to migrate and remigrate, to and from distant climates.

The courage of the Peregrine Falcon is equal to its powers, as we have observed upon many occasions, and which the following circumstance will fully evince.

A yearling female bird in our possession, which had never enjoyed its native habits of destruction, (having been taken before she could fly, and had never been much used to slaughter, except with an occasional small bird,) was suffered to be a whole day without food, at the expiration of which an old male Heron was introduced into the room where the Falcon was at liberty, the point of the Heron's bill having been previously sawed off. As soon as the Heron was in motion, the Falcon, who was also deprived of the means of flight, took post on a stool which was at one end of the room; and as the Heron, regardless of his enemy, traversed the apartment, the Falcon motionless kept her eyes fixed on her destined prey, till after several turns round the room, she judged the Heron was sufficiently near to effect her purpose, when she sprang at the head, intending to seize that part with her talons. In this however she failed, the stool not having given her sufficient elevation to reach the high-erected head of the Heron. This failure might probably have cost the Falcon her life, had the bill of her antagonist been perfect; for she received such a blow on the body, that must otherwise have inflicted a severe if not a mortal wound, from so pointed an instrument, urged with such power. Baffled in this attempt,

and

and having received a severe blow, it was conjectured no further attack would be made until the calls of hunger became more urgent. The Falcon, however, had soon regained her station, and it was not long before we perceived the Heron regardless of his foe pass very near, when the Falcon in a second attempt to seize her prey as before, was equally foiled, and again received a severe check from the bill of the Heron. Finding her efforts had failed for want of the advantage nature had assigned her, instinct directed the Falcon to a box that stood on the opposite side of the room, which was somewhat higher. Here she again seemed to meditate another attack, by watching every motion of the Heron, who continued his rounds with a view to make his escape; and it was not long before an opportunity offered for Falco to make an assault from her more elevated station. Here she had found an humble substitute for those powers with which nature had so amply furnished her, but of which she had been deprived, and at last succeeded by springing from her perch, and seizing the unfortunate Heron by the head and upper part of the neck with her talons, which instantly brought him to the ground. Now the unequal contest was soon determined; for in vain did the superior weight and strength of the Heron drag and flounder with his enemy across the floor; in vain did he flap his unwieldy pinions to shake off the tyrant of the air; nor could even his gigantic legs force her from the bloody grasp; her work was short, and certain; no efforts could compel her now to quit her deadly gripe; the powerful, and only dreaded arms of her antagonist were secured, and thus disarmed, he became a sure and easy prey. Scarcely was the gigantic bird prostrate on the ground, than death ensued; for in this noble race, destined for blood and slaughter, torture makes no part of its nature, but, like what we are told of the generous Lion, exulting in death, but disdaining cruelty. In less than half a minute did the Falcon tear out the gullet and windpipe of the Heron, and regaled on the head and neck.

The

The Falcon which had killed the Heron was afterwards killed by a younger bird of her own species in a similar manner. She was confined in the same apartment with three others that were taken from the same nest, and not above six months old, two females, and one male; one of the females broke her chain, and by that means having considerable advantage over the older bird, which was chained, soon killed her.

One of these young Falcons was, after two years, suffered to have her liberty, and for a long time took possession of the tower of the church, and would descend to the person who usually supplied her daily food; but at last, she probably acquired her native powers, and shifted for herself.

How characteristic of genuine courage would the nature of the generous breed of Hawks appear, were we not assured that sentiment bears no part in their actions, but that instinct, that powerful principle of unerring action in secondary beings, supplies the place of reason, and has wisely been given by Nature's hand to direct all in that course, which shall not only conduce to their own existence and comforts, but also to answer the original designs and more extended views of the Creator.

Thus, the more ignoble birds of prey, who are either not endowed with courage, or strength, rarely attack any animal stronger than themselves, but are content to make a prey of those divested of power to resist. These, conscious of the weakness of their quarry, disrobe them while yet alive, and frequently begin their meal on the extremities of the tortured victim, viewing as it were, with pleasure, the panting, bleeding sacrifice to their unquenchable thirst for blood.

Not so with the noble and more powerful race; these, from their bold and intrepid nature, cannot risk an advantage they have taken by dexterity, of an animal vastly superior in bodily strength, and therefore the vital parts of such are the object of their first attack, in order to secure their prey as

expeditiously

expeditiously as possible by death, and thereby prevent the chance either of losing it, or of receiving an injury by long and reiterated struggles under the agonies of torture.

If the cowardly Buzzard is given a living bird that he ventures to seize, he plucks off its feathers, and begins his repast indiscriminately at any part he may chance to draw blood; whereas we have observed, this is not the case with the generous breed of the same tribe. The intrepid Peregrine knew the extent of her power, when she was opposed to such superior strength as that of the Heron; she was conscious of her inability to hold her antagonist by grasping his body, especially while his destructive weapon was at liberty, which might have reversed the issue of the contest. The head therefore, or the upper part of the neck nearest to the head, were the only places that could secure to her a prompt and decisive victory, over an animal that so much exceeded her in size and strength, without endangering her own person.

Was a living bird of inferior size given to the Peregrine, she would not hesitate to seize it by the body with her talons; but the operations of nature are invariable; the same immutable instinct appears; the head is the first crushed, and perhaps eaten, before the body is touched.

It is not the nature of a Falcon to attack on the ground, or to get in contact with a large bird; it is on wing her powers are to be estimated; and here it is astonishing to perceive the force with which she pounces her prey. How this is performed without receiving any injury by the contact with such velocity, is not easily ascertained; in what manner the quarry receives its *Coup de grace* without repercussion, is equally mysterious. Is it by striking the talon into the *vertebræ* as the Spanish Bull is killed, or is it by a contusion on the head?

FALCON-ROUGH-LEGGED. Falco lagopus.
Shaw. Zool. vii. p. 145.

Doctor

Doctor Shaw is of opinion that the Dusky Falcon of the *Arctic Zoology* is only a variety of this bird; and why should not the Booted Falcon, originally described by Brisson, be another variety? Its being rather smaller may be occasioned by sex. We know that the Rough-legged Falcon is subject to considerable variety, and that the Booted Falcon seems to stand singly on record, unless *La Buse Gantèe* of Levaillant, (which Dr. Latham in his second supplement to his *Synopsis* refers to for the Booted Falcon) be a variety of that species. It should seem M. Beckstein is of opinion this variety is only the young male of the Rough-legged Falcon. Levaillant gives this bird as an inhabitant of the Cape of Good Hope, but acknowledges that he has seen a species in Lorrain, in France, very similar, "and which is very probable," says Dr. Latham "as we have the bird in some of the counties in England." This remark of our friend, whose ornithological credit stands so deservedly high in estimation, may stamp an opinion that the Booted Falcon as well as the Rough-legged Falcon is a native of England; whereas we have the Doctor's authority for saying that the variety found in England similar to that observed in Lorrain is probably the male, or variety of the *lagopus* as suggested by Beckstein. Upon future investigation it will probably be found that *Falco pennatus* and *lagopus*, with their incidental varieties from sex and age will be referred to one species.

FALCON-SPOTTED. Falco versicolor.

Doctor Shaw, on the authority of Monsieur Daudin, has given this bird (originally described by Mr. Pennant) as one of the many varieties to which the Common Falcon, *Falco communis* is subject; but from its superior size and predominance of white plumage, we rather suspect it to be a variety of the Jer-Falcon.

FASCEDDAR. vide Gull Arctic.

FELTIFER. vide Fieldfare.

FINCH-COPPER. vide Finch-Chaff.

FINCH-MARYGOLD. vide Wren golden-crested.

FLYCATCHER-PIED. Muscicapa atricapilla.
Bewick. Br. Birds. i. t. p. 201.

This bird rarely if ever makes its appearance in the southern parts of the island, from which it may be inferred that it is a northern species, and we might rather expect it to be indigenous than only a summer visitant.

Mr. Bolton in his *Harmonia Ruralis* says, the Colefinch has been known to build its nest in an almond tree when in full blossom. The eggs represented in this work are five in number, of a blue colour.

This is indeed early in the season, for the Almond is frequently in blossom the latter end of March, before any leaves could conceal the nest.

Other authors assure us the nest is formed in the hole of a tree, so that it is extremely difficult to reconcile these accounts, for it has been justly considered that the habit of nidification is a strong specific character more rarely subject to variation than the bird itself.

Mr. Bewick speaks of a pair of these birds having been shot at Benton in Northumberland, but is silent with respect to the season; one of these wanted the white spot on the forehead, in other respects they were similar; the upper parts in both were black obscurely mixed with brown.

This author adds the following remark, but unfortunately does not quote his authority. "The nest of this bird, with "a very great number of young, was found in a hole of a "tree in Axwell-Park, June 18, 1801: the parent birds,

"but

" but particularly the male, incessantly kept feeding them " with small flies, which they were extremely expert in catch- " ing."

If the author had ocular demonstration of this remark it is unfortunate that the circumstance should be omitted, for we know by long experience, how little is to be depended on the observations of the unscientific.

Mr. Bolton who was a Yorkshire gentleman, says that it visits the West Riding of Yorkshire and departs with its young in September. (*Harmonia Ruralis* p. 40.)

This account certainly implies that Mr. Bolton found the bird in his neighbourhood sufficiently plentiful to make such observations on its autumnal migrations, but we cannot conceive that it would retire northward in the colder months: and if it does not change its habits with the season, and continues less noticed, it certainly proceeds a very little way southward. We believe there is no instance on record of its being killed in the southern counties of Kent or Sussex, the evident rout of the bird if it migrated to, and from the continent of Europe, like the spotted species.

With regard to the *very great number of young* found in the hole of a tree, as related by Mr. Bewick, we cannot help expressing a doubt that he has been deceived, as this circumstance alone, so contrary to the characters of its congeners, is sufficient to create doubts in the mind of the scientific ornithologist, unless we had been told the author spoke from personal knowledge.

Sepp and Kramer both assert that the *Muscicapa atricapilla* builds its nest in the hole of a tree; Linnæus admits it in his first edition of the *Fauna Suecica,* but appears to have rejected it in the second. Mr. Oedman however avers it to be a Swedish bird, and says it lays five eggs in the hollow of a tree. Whether it winters so far North we are not informed, but we are told it braves the winter in Norway. " The Pied

Flycatcher" says Dr. Reeves, in his Essay on torpidity p. 93 " lives on soft seeds and insects in this country ; but it feeds very different in Norway, especially during winter, when it repairs to the habitations of men, and subsists on flesh dried in the smoke." If then this bird breeds so far north as Sweden, and continues the whole year in Norway, there can be little doubt but that it is truly indigenous to England, since it is known to breed there. It is however a local species, never has been plentiful, and seems at present to become rare, so that we have not hitherto been able to ascertain whether it has ever been identified with us in winter, though we have scarcely a doubt that it remains in England the whole year. It is one of the very few amongst the smaller tribe of birds whose nest we have not taken with our own hands, but this is in a great measure compensated by the kind assistance of a scientific friend, and naturalist, the Rev. Mr. Dalton, of Copgrove, in the West Riding of Yorkshire, who is well acquainted with the bird, and has frequently seen it about his house in the summer, but does not recollect ever to have noticed it in the winter. This gentleman favoured us with a pair of these birds shot in his neighbourhood, in which there is no material distinction between the sexes, except that the female is rather less bright in the black parts of the plumage. At our request Mr. Dalton has recently furnished us with the nest and eggs taken the beginning of May in the present year, (1811) in the same county ; remarking at the same time, that this bird had not made its appearance about his house this season, and that it was become very scarce. The nest was taken from a hole in a tree ; it is composed of dry leaves intermixed with broad pieces of the interior bark of some tree, and a little hay, with a few long hairs, and three or four feathers form the lining. The materials are so coarse, and destitute of wool or other substance that is capable of connecting the parts, that it scarcely holds together, evidently bespeaking that it had been taken from the situation described.

The

The eggs are five in number, of a very pale blue, about the size and colour of those of the Redstart, but rather paler. The nest is very different from that of the Redstart, which is more compact, and formed of moss, plentifully lined with hair and feathers; whereas in the Flycatcher's nest now before us, there is not a single sprig of moss.

The scientific Ornithologist will be gratified by these additions which Mr. Dalton has enabled us to give to the history of this local species; and we may hope through the same channel to obtain a more competent knowledge of its manners, and general history. It now remains to discover whether any change of plumage in the autumn takes place, that may hitherto have occasioned the want of identifying this bird in the winter. Observations on the colour of the plumage of the young, just before, or after they leave the nest, might throw light on the subject. But we cannot help suspecting that its rarity, and extreme locality, has been the occasion of the desiderata in its natural history, and that our scientific friend will hereafter find that the bird in question is in fact indigenous to Yorkshire, continuing there the whole year; but perhaps is induced, by local circumstances, to change its situation after the breeding season.

The place in which our nest was found, as well as the number of eggs perfectly accord with the accounts of those foreign authors before mentioned; but not with the accounts given by either Mr. Bolton, or Mr. Bewick. From the very early period of the year that the supposed Flycatcher's nest was noticed by the former amongst the branches of an almond tree, we have very little doubt but that it was actually belonging to the Hedge Warbler, the earliest breeder, and the only one that lays blue eggs in such a situation. It is possible such an opinion was induced by the appearance of the Pied Flycatcher on, or in the neighbourhood of the tree. What the bird could be, the nest of which is described to

belong

belong to the Flycatcher, in the hole of a tree, containing a *very great number of young*, is impossible to determine, but we cannot think it belonged to this species, since five eggs appear to be the utmost number the Pied Flycatcher has been clearly ascertained to lay, which also corresponds with the nature of its congeners.

FULMAR. Procellaria glacialis.

Bewick Br. Birds ii. t. p. 243.

PROVINCIAL.

Mallemock, Malmock, or Mallduck.

A very complete skeleton of this bird has been presented to us by Colonel Templer, and with it the following genuine *Newfoundland poetry*, which was given to him by a master of a trader to that country, accompanied with the narrative.

"This bird (which seems to be known only by the title of "*John Down* by the fishermen) attends the fishing vessels "on the banks of Newfoundland, and feeds on the liver "and offal of the Cod-fish that is thrown overboard. It "is taken by means of a hook baited with a piece of liver, "and being stretched at length to a stick, it is sunk under "water, and in half an hour (as the informant declared) is "compleatly skeletonized by what the sailors call Sea-lice." Some of these insects were procured for us in Newfoundland, and did not turn out to be what is usually denominated Sea-Louse (*Oniscus*) but *Cancer Locusta*, the same in every respect as that found on our coast, and figured in the *Linnæan Transactions*, vol. 9, tab. 4, fig. 1.

The following poetical soliloquy has been transcribed without the smallest alteration except in orthography, which was necessary to its being generally understood.

Here hangs I John Down for ever,
That often crossed the bank for liver,
Now to my sorrow and great surprise
Here I hang an anatomize.

Come

Come all you birds now of my flock,
Don't be too anxious for to eat,
For if in that liver a hook shall be,
You'll share the fate then here like me.

It is remarkable that in this skeleton the skin of the legs, and webs of the feet remain as perfect as in a fresh specimen; from which it may be inferred, that these anatomists, be what they may, are extremely expeditious in their work, but it can scarcely be credited, that it it could be so completely effected in so short a time as half an hour. No human art could so completely divest a bird of every particle of flesh, and leave all the finer bones, cartilages, and ligaments, in so perfect a condition; nothing but the conjoint efforts of numerous insects, with their minute nippers, could so admirably prepare such a subject.

We are assured that this species of *Petrel* abounds in the Northern seas, where they follow the track of the wounded Whale, and when he is exhausted, they instantly alight on this huge monster of the deep, and with their strong hooked bills penetrate the skin, and gorge themselves with the blubber.

GADWALL. Anas strepera.
Lath. Syn. Sup. ii. p. 353.
Lin. Trans. iv. p. 111. t. 13, f. 7, 8. (trachea)
Bewick Br. Birds. ii. p. 350.

PROVINCIAL.

Rodge.

This species of Duck appears to be extremely rare in England, so much so, that in no instance have we been able to procure a fresh specimen, in the great number of years we have attended to the subject of Ornithology.

The trachea (which as it becomes better known, forms a strong specific character in this tribe of aquatic birds) has been described and figured by Dr. Latham, in an admirable paper

on

on the subject, printed in the *Transactions of the Linnæan Society*: and is again described in the second vol. of the Supplement to the *General Synopsis* of Birds. This we shall take the liberty of transcribing.

"The windpipe of the *male* has a bony bladder and arch "somewhat like that of the *Pintail Duck*; but the globu- "lar part not quite so large: we may observe too, that it ad- "heres to the side of the arch, quite to the bottom, whereas, "in the *Pintail*, it is attached to the side of the arch by a "small portion only.

GAIR-FOWL. Vide Auk-Great.

GALLINULE-LITTLE. Gallinula minuta.

We are indebted to Mr. Tucker (the author of a periodical work on birds, before mentioned) for this very interesting little bird, which appears not only to be new as British, but to be a non-descript species.

The weight was two ounces; length seven inches and three quarters. The bill is five eighths of an inch long, of a bright green colour: the upper part of the head dusky brown: the cheeks pale brown: over each eye cinereous: the chin and throat white, shaded into a cream-colour on the upper part of the neck before: the lower part of the neck, breast, sides, and greater part of the body beneath, plain fawn-colour: the lower belly, thighs, and vent, olive-brown, spotted with white, and slightly barred with paler brown: the back, and sides of the neck, pale olivaceous-brown: back and scapulars black, deeply margined with the same colour as the last, the inner margins very pale, similar to the under part of the neck: the rump plain olive-brown: the tail of a similar colour: the legs bright green, bare for three eighths of an inch above the knee, and an inch and a half long from the knee to the toes: the middle toe, including the claw, is of the same length: the claws horn colour: the hind toe, including the claw, five eighths of an inch long.

The

LITTLE GALLINULE.

The tail is much mutilated, but the remaining feathers are as described, and extend a trifle beyond the point of the wings.

We might have been induced to have considered this bird as an accidental *lusus* variety of the spotted Waterhen, had it not been for its very inferior size, and other peculiarities. By weight it is about half the size of the spotted species, and is inferior in length about an inch and a quarter. It has more the shape of the Land Rail, being long in proportion to its bulk, and much compressed: the legs and toes are full as long as those of the spotted species: the bill is also of equal length, and rather more slender: the head is smaller, and the neck much more slender: the form of the forehead is essentially different, the feathers sloping from the front to the gape very considerably, which is not the case with the other species: the hind toe is also rather longer than that of an old male spotted Waterhen with which it was compared: the tertials of the wings are remarkably short, an unusual circumstance for a bird of this genus, for, in the Land Rail, and spotted Gallinule, the tertials almost obscure the whole of the primary quills when the wing is closed. There does not appear to be any defect or mutilation in the wings, and both sides are similar, the tertials equally extending to only the point of the seventh feather of the primary quills, leaving the points of the first six conspicuous. The common Gallinule, indeed, has not the whole of the primary quills concealed by the tertials, as the ends of four or five may be seen beyond them when the wings are closed.

We have been thus particular, lest a hasty conclusion might be drawn, that this bird is either the young, or a *lusus* variety, of the spotted Gallinule; whereas, by the comparative particulars here related, such an opinion cannot exist. We have obtained specimens of the spotted Gallinule early in September, and some were evidently the young of that season, and the chief distinction between them and the old birds consisted in being rather

rather less spotted, and the colours not so generally bright, besides being rather smaller; and in these, as in all other young birds, the bill and toes were in proportion. This bird, although not above half the weight, and considerably inferior in length, has the bill and toes fully as long, and more slender, and the back toe rather longer. We have never seen the spotted Gallinule in its infancy, nor, perhaps, so soon as it could fly; but the shape and proportion of the limbs would be similar to the adult, in which this bird essentially differs. No author, to our knowledge, has described the Spotted Gallinule in its early plumage to be different from that of the adult; and we know that in neither the Common nor Crake Gallinules, nor in the Water Rail, (a bird of similar habits) does any material difference exist between the young and the old birds. In fact, the plumage, and general appearance are so extremely dissimilar to that of the Spotted Gallinule, that if this bird had been exotic, a comparison would never have been thought necessary; but as the species of the genus are not numerous, and only three of those known to inhabit this country, the subject required scrupulous investigation, especially as no such bird appears to have been described by any Ornithological writer.

The Little Gallinule was shot near Ashburton, in Devonshire, in the year 1809.

GALLINULE-SPOTTED. Gallinula porzana.

Water-crake, Bewick Br. Birds, 11. t. p. 10.

PROVINCIAL.

Skitty, Spotted Rail, or Lesser spotted Water-Rail.

We have obtained this species as early as the fourteenth of March, and as late in the year as the twenty-third of October, in Devonshire, but never in the winter months. The last mentioned was only slightly wounded in the wing; the part was amputated, and the bird lived for nearly a month; its death could not be accounted for, as it was fat, and the wound perfectly healed. It

It fed freely on worms, the day it was captured, and was observed to partake largely of bread and milk, the food of some Ruffs, with whom it was confined in a spacious place.

GAMBET. Tringa Gambetta.

By keeping Ruffs in confinement for many years, and attending to their change of plumage, we have no doubt that several of the Sandpiper class which have been described as distinct species, are, in fact, no other than the Ruff, destitute of the long feathers which adorn its head and neck, for about three months in the spring of the year. Amongst the number we have ascertained the Greenwich, and the Yellow-Legged Sandpipers; and we have had some specimens so nearly corresponding with the Aberdeen Sandpiper, and the Gambet, that scarcely a doubt exists in our minds, but that the whole of these, and some others, are amongst the endless variety of *Tringa pugnax*, not two of which are to be found exactly alike, and many as dissimilar as any two distinct species of the same genus.

GAN. Vide Gannet.

GANNET. Pelicanus bassanus.
Trans. Wernerian Society, vol. 1.

We have procured several of this species alive, but have been unable to keep them in health for any length of time.

The bill, when alive, is of an elegant blueish-grey colour: the legs are singularly marked, being of a dusky colour, with the front blueish-yellow, which divides at the feet, and forms a line of the same colour along the ridge of the three forward toes: the irides very pale yellow: the nictitating membrane is unusually strong, and nearly as transparent as glass.

This bird is said to go as far south as the Tagus, to feed on *Sardinæ*; and according to Acerbi's List of Lapland Birds, it

is

is also found as far north in that country as the Gulph of Bothnia.

By an old Scotish law, the proprietor of the Bass island has a right to visit the neighbouring isles, and drive away the Gannets, in order that they may return to his domain, being considered as his sole property ; and from which it is said he derives a considerable profit by taking the young, and sending them to market. We have, indeed, heard that they are by no means a bad relish, and are sometimes eaten to give a whet to the appetite.

The egg is white, and very like that of the Corvorant, but rather larger : those sent to us by a Scotish friend are by no means so large as the egg of a goose, but weighs about three ounces and a quarter each.

The Gannet is essentially different from the Corvorant and Shag, in almost every particular, although they have been placed in the same genus,—probably for no other reason than that they have one common character, the four toes united by a web ; but so has the Tropic-bird, *Phaeton*, and the Darter, *Plotus*.

The Gannet is incapable of diving, or at least it does not appear that any exertion or alarm can force it to immerse. Upon the water it swims as buoyant as a Gull. When Gannets have been offered fish, they took it, but would never go into a pond after it, and, from every appearance of their actions on the water, (to which they never went but by compulsion) they could not procure the fish out of the reach of the extent of their neck.

The Gannet is frequently observed in the English Channel during the winter, and continues as late as the month of April ; Mr. Pennant was therefore misinformed, when he stated that they were seen no longer on the coast of *Cornwall* than November, when the pilchards retire.

What their particular object is for remaining so long in the channel, we have been unable to ascertain, but we have had

had them brought to us by fishermen in the months of February, March, and April; from whom we learn that they are only occasionally seen, and from their actions appeared busied in fishing; but what the shoal of fish was that they were apparently following, could not be discovered.

In the month of February, 1808, and in March, the preceding year, many were taken alive; and more might have been captured, for, as the fishermen observe, they rise at certain times from the water with difficulty, at which time they are easily run down by a boat. When surprised, they defend themselves obstinately and powerfully, striking with their bills, and pinching very severely. It should seem, from the accounts we have been able to collect from these unintelligible sort of beings, the fishermen, that the Gannets cannot rise from the water, but against the wind, and that when that advantage is taken of them, they are easily captured. This defect however is certainly not constant, but only occasional, as we perceive in the Corvorant, Divers, Grebes, and many piscivorous birds at particular times, when they are both gorged with prey, and their feathers have become wet with the exertion of procuring it. These however most frequently baffle their pursuers by immersion and long continuance under water. The Gannet, on the contrary, has no such resource; when his stomach is replete with fish, and his plumage saturated with water occasioned by the concussion on its surface, by his rapid descent upon his prey, his only alternative is his oars upon the bosom of the deep, for he cannot dive by reason of his body being so much specifically lighter than that element.

A Gannet brought to us alive on the twentieth of March, in the Year 1807, took no kind of food for seven days; it was then crammed with both fish and flesh, and soon after began to devour all white fish greedily, but did not choose to pick up even a Plaise when the back was uppermost.

It

It was remarked, that when the bill was held so as to close the mandibles for a considerable time, respiration became laborious, there being no nostrils.

When the bird was placed on the water of a pond, nothing could induce him to attempt to dive; and from the manner of his putting the bill, and sometimes the whole head under water, as if searching for fish; it appears that their prey is frequently taken in that manner. It is probable more fish are caught in their congregated migrations, when the shoals are near the surface, than by their descent upon wing; for the Herrings, Pilchards, Mackarel, and other gregarious fishes, cannot at that time avoid their enemy, who is floating in the midst of profusion.

In the act of respiration, there appears to be always some air propelled between the skin and the body of this bird, as a visible expansion and contraction is observed about the breast, and this singular conformation makes the bird so buoyant, that it floats high on the water, and not sunk beneath its surface, as observed in the Corvorant and Shag.

The legs are not placed so far behind as in such of the feathered tribe who procure their subsistence by immersion: the Gannet, consequently, has the centre of gravity placed more forward; and, when standing, the body is nearly horizontal like a goose, and not erect like a Corvoran.

Having, by the dissection of a specimen of the Gannet for preservation, noticed the slight and partial adhesion of the skin to the flesh of the whole under parts of the body, we availed ourselves of the opportunity of paying more attention to the structure of this bird, and by experiments endeavoured to discover to what extent, and upon what principle, the inflation of the body was performed.

The appearance of so singular a conformation brought to recollection what Buffon relates of the Pelican; who remarks that from the lungs the air passes through axillary pipes, into a thick vesicular celular membrane that covers the

the muscles, and envelopes the whole body. The structure, however, of the Gannet, although probably intended for similar purposes, is very different from that of the Pelican, according to the relation of that naturalist.

The bill of the Gannet differs from that of most birds, for it is not only destitute of nostrils, but on each side the upper mandible towards the base, is a dentation that divides the margin, and thus admits of considerable motion.

It has been customary to describe the Gannet as possessing a large pouch like the Pelican under the chin, capable of containing five or six Herrings; but this is erroneous. The *œsophagus* is extremely capacious, and the skin from the chin downwards extending along the neck, is equally capable of dilation, so that five or six fishes, equal in size to that of a Herring, might be contained in the gullet and stomach; for there appears to be very little difference between them; or in other words, the stomach is a continuation of the *œsophagus* with little or no stricture or division.

It is well known, that many birds regurgitate with much ease and facility; and that instinct points out to them the necessity of preparing the food intended for the nourishment of their young, in the receptacle, usually termed the craw: in this manner the Gannet can readily disgorge the contents of its stomach (for it has no craw), to satisfy its young.

By comparative anatomy, it has been clearly demonstrated, that birds in general are provided with air-vessels in different parts of the body, and that many of their bones are not destitute of this contrivance, admirably fitted for increasing their levity, and consequent buoyancy, as well as progressive motion through that element in which they are intended principally to move; and that too, with a velocity that far surpasses all other parts of animated nature. Mr. John Hunter (in the Transactions of the Royal Society) proves, that the air-cells, in the parts already mentioned, have a free communication with the lungs, by means of openings on their surface

surface, through which the air passes readily into them : and it clearly appears, there is no *diaphragm* that confines the air to the regions or cavity of the breast, but that the whole of the abdomen is equally inflated by inspiration through the lungs.

Thus far has the scientific researches of that anatomist contributed to our knowledge on this subject, but we may presume, much remains to be done. No one appears to have noticed the phenomena attendant on the construction of the Gannet, or to what further extent this circulation of aerial fluid is carried in some particular species of birds; a circumstance which demands our highest admiration, when we contemplate the advantages which such a structure may be of, in conducing to the comforts and perhaps to the very existence of such animals.

Several Gannets having been subjected to artificial inflation, we shall state the result, and relate the manner in which the experiments were pursued. A pipe was first introduced into the *trachea*, and when air was propelled through it, the whole internal cavity of the body was inflated, but no air passed into the external cells between the skin and the body. An incision was then made in the lower part of the abdomen into the body, very near the vent; air was forced through a pipe introduced at that part, (the pipe in the *trachea* having been previously stopped) and a similar inflation ensued, without affecting the exterior cells. The pipe was now removed from the *trachea*, and upon the air being propelled with force through the pipe near the vent, it readily found its way through the *larynx*, producing a noise similar to the sound emitted by the living bird. A small opening was then made in the skin on the left side, about midway between the wing and the thigh, and a pipe introduced, having first stopped those directly communicating with the internal parts. It was now obvious that when air was forced through this orifice, the skin on that side as far as the middle line of the body, was greatly inflated, extending into the lower part of the

the neck, along the larger joints of the wing, down the thigh, and also into the cavity of the body; but the right side was not in the least affected. The pipe at the trachea being now removed, the air produced a similar effect upon the larynx as before mentioned, but not so loud. Still suspecting that there was a communication between the sides, by means of some valvular apparatus, the right side was subjected to the same experiment; the result however negatived our expectation, the effect produced being similar in every respect.

From a repetition of these experiments upon several subjects, it became evident that there was a communication between the lungs and the cellular membrane that covers the greater part of the body, as well as with the whole cavity of the body, but that, by reason of some valvular contrivance, the skin could not be artificially inflated through the lungs, although air would readily pass in a contrary direction. It is also clear that there is no direct communication between the sides.

In order to examine this extraordinary structure, we made a longitudinal incision the whole length of the body, a little on one side of the keel, or what is commonly termed the breast-bone; by this means the membrane that connects the skin to the body, and cuts off the communication between the sides, was easily examined; but nothing was observed, indicating that a communication could be effected, even at the will of the animal. On each side, nearly equidistant between this pectoral membrane and the back, is situated another longitudinal one, very similar to the last, but perforated; between this and the pectoral are about nine irregular transverse membranous septa, that hold the skin firmly to the body, having a free communication with each other. The skin is also furnished with a transparent cellular membrane, the cells being regularly perforated close to the base of each feather. At the upper part of the breast is a large bag, which extends

some way up the neck; this is attached to the skin by the septa of innumerable small cells, but no opening into this cellular bag could be discovered; the introduction however of a small pipe through an artificial aperture, clearly demonstrated a passage to the lungs, as the whole internal cavity of the body was inflated, and the air issued from the *trachea*. Upon opening this bag the passage of communication with the internal parts appeared to be under the *clavicles* as a thin perforated membrane was perceived at the bottom, leading to the thorax, not directly into the lungs, but near the part where the *trachea* divaricates, and afterwards communicating with the lungs. It could not, however, be discovered where the air could find a passage from the great magazine into the cellular bag, and yet there is every reason to conclude that at this part some valvular passage exists.

Pursuing our researches, we observed at the bottom of each lobe of the lungs, a considerable opening for the passage of air into the cavity of the body. But what arrested our particular attention, was a wonderful provision of nature, for the protection of the vital parts, by guarding the *viscera* with a strong integument, that preserves them in a proper degree of moisture, and contributes to the due secretions for lubricating those parts, so essential to the functions of their delicate nature, which might otherwise be too quickly carried off, by the constant circulation of fresh air that nearly surrounds them; for this integument is held only by ligaments to the back and front, leaving all other parts free for inspired air. The liver and intestines are firmly attached to the surrounding integument: the heart is enveloped by a similar covering, which is only partially connected to the common one.

In the *trachea* nothing very remarkable occurs, except two small glands about the size of a pea at the lower extremity. The tongue is so extremely diminutive, as scarcely to be entitled to that denomination. The *clavicles*, or what is commonly called

called the merry-thought, which are usually affixed to the point of the keel of the breast-bone by a ligament, is in the Gannet, so firmly united, as to appear a part of it.

From what has been already observed, it will not be unreasonable to conclude that the Gannet is endowed with such singular properties for very different purposes than those of long and continual immersion, of which we have before stated it appears to be incapable. But such a power of inflation must contribute greatly to lessen the concussion in its rapid descent upon water, in order to seize its prey. Besides as the enlargement of the surface, without materially adding to the specific gravity, must greatly contribute to its buoyancy both in air and water, it is well adapted for residing in the midst of the most tempestuous sea, floating on its surface in perfect security, and following those shoals of fishes on which depends its whole existence. Thus, when all other birds are compelled to seek shelter in bays and creeks, the Gannet is enabled to brave the severest weather in all seasons, without attempting to near the shore.

This contrivance, may also be of the most important service to an animal which is constantly exposed, even in the most inclement season, and cannot quit its station without starving. Nothing could possibly conduce more to its security against intense cold, or be better adapted to preserve the necessary temperature of animal heat, than the intermediate air dispersed between the skin and the body, since that element is found to be a non-conductor of caloric. Upon this principle, what animal can be more securely protected against cold, or retain its vital heat so effectually as the Gannet, or such birds as are almost surrounded with a body of confined air, divided by cells, and intersected by membranes between the skin and the body, and that skin so amply covered with a light, porous substance filled also with air, and impervious to water.

The Gannet is capable of containing about three full inspirations of the human lungs, divided into nearly three equal portions, the cellular parts under the skin on each side, holding nearly as much as the cavity of the body. Now as a full, or extraordinary inspiration of the human lungs has been considered to occupy a space of about sixty cubic inches, (Phil. Trans. vol. 69. p. 349) so the Gannet is capable of containing not less than 180 cubic inches of air at one time, subject to the will of the bird under certain impressions.

Another singular property belonging to this bird is, that the cellular membrane beneath the skin is the habitation of an apterous insect; and is, perhaps, the only known instance of a true insect having been found to perpetually reside, and propagate within the body of another living animal.

For an account of this insect we refer to the *Memoirs* of the *Wernerian Society*.

GARGANEY. Anas querquedula.
Bewick Br. Birds, ii. p. 374.
Lath. Syn. Sup. ii. p. 360.
Lin. Trans. iv. p. 108. t. 13. f. 2. 3. (trachea).

PROVINCIAL.
Cricket-Teal.

We have found the male Garganey to weigh about fourteen or fifteen ounces; the length about sixteen inches: the tail possesses fourteen feathers; the green feathers also that form the speculum in the wing are tipped with white.

This species has a *tracheal* labyrinth, a figure of which has been given to the public by Doctor Latham in the work referred to.

The labyrinth is entirely bony like that of the common mallard, of an oval shape, three or four times as large as that of the Teal, and essentially different; it is, as Doctor Latham

Latham observes, placed perpendicular to the trachea, not on the side as in that bird; on one side is a slight indentation for the admission of two muscles; on the opposite side, or that situated next to the breast, it is flattened, and from the upper part of it the *branchi*, or divarication of the wind-pipe originate.

GLADDY or GOLDEN-GLADDY. vide Bunting-yellow.

GOATSUCKER. Caprimulgus Europæus.

By Borlase called Night-Crow.

This bird we shot as late as the 8th of November in the year 1805, in Devonshire. It is remarkable that in that year all the migrative species were unusually late; the swallows and martins did not finally leave the South of Devon till after the 19th of the same month.

GODWIN. Vide Godwit common.

GODWIT-CINEREOUS. Scolopax canescens.

One of these birds in the late unfortunate *Leverian Museum* was marked Grey-Godwit. It appeared to be rather smaller than the Common Godwit, the bill and legs rather shorter, and more slender; the tail barred dusky and white nearly to the base: the rump white with a few spots: the back and scapulars pale brown, with grey borders.

Is not this, and the one described by Mr. Pennant to be so like the Greenshank (except in the size of the bill) actually varieties of that bird, or young birds in their first, or immature plumage?

GODWIT-COMMON. Scolopax œgocephala

Bewick Br. Birds ii. t. p. 78.

PROVINCIAL.

Godwin or Godwyn.

We

We believe this species is no longer to be found in England during the breeding season.

In a late tour through Lincolnshire no trace could be found of the Godwit's breeding in the fens of that country. By the accounts of the oldest, and most expert bird-catchers, and fen-shooters, it should appear that, whatever may have been the case formerly, no such bird has been known to breed in those parts within the recollection of the present generation. It is true these birds are sometimes taken in the nets placed for catching Ruffs, and that chiefly in the autumn, on their return from the more extensive swamps of the North of Europe, remote from the habitation of man. Godwits were formerly fattened by the same means, and with the Ruffs; but we are assured by Mr. Towns the noted Ruff-fatter at Spalding, that he had not procured any for these twenty years.

GODWIT-RED. Scolopax Lapponica.
Godwit var. A. Lath. Syn, Sup. ii. p. 309.
Scolopax Belgica Gmel. Syst. p. 663.

The variety of the Godwit described by Doctor Latham in his last supplement, is, we conceive, a variety of the Red, not the Common species; the ferruginous colour of the head, neck, and breast, as well as the borders of the feathers of the back; the length of the legs, as well as their dark colour, all bespeak it. Indeed the description given differs very little from a specimen of the Red Godwit now before us, especially in the tail having all the feathers except the two middle ones white at the base. This seems to be an invariable mark of distinction between the two species in all their varieties. Two or three originally in the *Leverian Museum*, and in private collections, whatever were their variations in other respects, possessed this specific character, as well as the superior length of the legs.

The

The Linnæan trivial name bespeaks it to be a Lapland bird, and we find it enumerated in Acerbi's list of the birds of that country.

GODWIT-RED-LEGGED. vide Snipe-Spotted.

GOLDEN-EYE. Anas Clangula.

Lath. Syn. Sup. ii. p. 355. Lin. Trans. iv. p. 118. t. 15. f. 12. (trachea)

Bewick, Br. Birds, ii. t. p. 367.—Morillon, Id. ii. p. 371.

PROVINCIAL.

Pied-Wigeon.

[illegible] Notwithstanding the discordancy of opinion which still exists concerning the distinction between this bird and the supposed Morillon, we have obtained no information that has in the least shaken our former opinion; but, on the contrary, circumstances have rather tended to confirm it.

This bird is common in the estuary of Kingsbridge, and on Slapton Ley (a large piece of fresh water), where they are frequently seen in small flocks; and from whence we have, by the kind assistance of friends, obtained many for examination, in particular from Mr. Holdsworth. From these flocks have been shot those supposed to be the Morillon, and other varieties, if the change of plumage from the young to the adult can be so called.

It should be observed, that in all the males, in the feathers of that fictitious bird, the very remarkable *trachea* of the Golden-eye appeared; and in every little variation of plumage of the females, the same truss shape of the bird, the form of the bill, and legs, were similar; and what is more essential, the shape, and number of feathers of the tail (which is sixteen) were invariable.

The Morillon, described by Mr. Bewick, is indeed very far advanced towards the adult plumage of the male Golden-eye,

for

for in that, not only the head appeared to be advancing to black about the cheeks, but the white round the neck was much enlarged ; the scapulars and coverts of the wings were black and white, and, in other respects, appear to have been fast advancing towards maturity.

It should seem the Golden-eye is some years attaining its complete adult plumage, for those with the full black head, and the white spot in the cheek, rarely occur, although the young males, so well known by their extraordinary *trachea*, are common.

We have seen a specimen with the white spot, that had the feathers on the head dusky.

The windpipe of the Golden-eye (says Doctor Latham in his excellent essay on the *trachea* of birds, given in the *Transactions* of the *Linnean Society*) "is of a curious and wonderful structure, for the labyrinth is not only of a different, "and much more complicated form than any other, but a "singular enlargement takes place about the middle of the "trachea itself." The ventricose part consists of the same cartilaginous rings as the rest of the windpipe, and in fact is only a great enlargement of the same structure, being at least four times the diameter of any other part, or three inches or more in circumference, and about three inches in length. This part is so formed by the inequality of its cartilaginous annulations, and intermediate membranes, that it is not only capable of contracting to little more than an inch in length, but likewise of compression, the under part being in the contracted state considerably flattened. The labyrinthic part at the bottom of the *trachea* is of so extraordinary a form, and so complicated a structure, that no description could give an adequate idea of it ; suffice it to say, that it is very large, with a bony arch on one side, nearly transverse to the *trachea*; but for the perfect comprehension of it, we refer to the figure in the *Linnean Transactions*.

"It is manifest, (says Doctor Latham) that the structure "of the *trachea* in this bird being so very unlike that of any "other, will ever prevent its being confounded with a dif- "ferent species; and on that account I can with confidence "assert, that the *Anas Glaucion* of Linnæus, or *Morillon*, "commonly so called, has no existence taking it as a species, "for it is merely the Golden-eye incomplete in plumage. "But this is not the only one known by the name of *Morillon*, "for a specimen put into my hands for that bird, has proved "to be the young of the Tufted Duck, and others that of "the Scaup. Whatever share the structure of this singular "kind of *trachea* may have in promoting the loudness of the "voice, I will not here insist on; but it is notorious that the "cry is heard further off than many others of the genus.

GOLDSPINK. Vide Finch-gold.

GOOSANDER. Mergus Merganser.

Lath. Syn. Sup. ii. p. 336.

Greater Goosander, Lin. Trans. iv. p. 122.

Bewick B. Birds, ii. t. p. 254.

PROVINCIAL.

Jack-saw,

We have under the article Dundiver, given our reasons why we are still inclined to consider these birds distinct species.

In the VIIIth vol. of the *Linnean Transactions*, Mr. Simmonds remarks that there is so much similarity in the structure of the *Mergus Merganser* and *M. castor*, even in the intestines as well as in the *trachea*, *vertebræ* of the neck, and number of tail feathers (which in both are eighteen) to warrant a conclusion that they are the same, differing only in age or sex. But this information does not advance us one step towards clearing up this long contested point. It has long been known that males in the plumage of *Mergus castor*,

or

or Dundiver have been proved by dissection; and we have before been told that they possessed a *tracheal* labyrinth similar to that of *Mergus Merganser* or Goosander; but we should have been glad to have been informed whether in the *trachea* itself there had been one, or two enlargements; for otherwise we gain no additional knowledge.

We have before remarked, that later observations have proved, that at least some birds in the habit of the Dundiver have but one *tracheal* enlargement, besides the labyrinth; whereas the Goosander has two, both of which are figured in the *Berlin Transactions*. To this may be added the remarks of an excellent Ornithologist of the day, and a critical observer, Willughby, who speaking of the Goosander says, "It hath a huge bony labyrinth on the windpipe, above the divarications; and the windpipe hath, besides, two swellings out, one above another, each resembling a powder-puff."

These appear to be incontestible facts of the *trachea* of the Goosander possessing two enlargements; now, as no naturalist has yet described such an appearance in any *Merganser* of different plumage, we are yet in the dark as to the immature male of this species, as well as the female.

It may be reasonable to conclude that, if strict attention is paid to these birds, some with two *tracheal* enlargements may be found attendant on the plumage of the Dundiver, and others with only one, with perhaps very little variation in feather; the former the immatured male of *Mergus Merganser*, the latter the male *castor*; and the females of both these may be so similar, as to continue their obscurity in a country where they so seldom appear.

This species appears to be common on the Tornea, in Finland, during the breeding season; and their eggs are much coveted by the natives, who place decayed trees that are hollow near the banks of the river, which these birds enter, and there depos't their eggs to the number of twenty: these the Finlanders

Finlanders take out from time to time, but always leave two or three at least, in order to continue the breed. (Acerbi.)

If this tourist had been a critical Ornithologist, with such an opportunity to ascertain the complete natural history of this bird, we should not now have been left bewildered by strange, imperfect, and contradictory accounts, from which we have to reason, and perhaps at last conclude with false deductions.

GOOSE BALD. vide Goose-white-fronted.

GOOSE BEAN. Anas segetum.

A male and female, wounded and taken alive, were sent to us by Mr. Holdsworth; the male was afterwards killed by a barley corn getting into the *larynx*, and lodging just within the *rima glottidis*. The female is still alive, and become docile.

This species like the Bernacle has a callous knob upon the elbow of the wing. The *trachea* increases in size about the middle, and the *branchial* tubes are short and tumid. The bill is orange except the nail, tip of the under mandible, and round the base, reaching on the upper mandible, as far as the nostrils, where it terminates in a tridentate figure; these parts are black; the edges of both mandibles are serrated, in the upper there is a row of smaller denticulations within the larger, between which those of the lower mandible lock; an admirable contrivance for cutting vegetable food. The irides are rufous-brown.

GOOSE-BERNACLE. Anas erythropus.

PROVINCIAL.

Claik-Goose. Routheroock.

Bewick Br. Birds. ii. t. p. 307.

The

The confusion between this species and the Brent, the *Bernicla* of Linnæus renders it difficult to get at the *habitat* of the one, without confounding it with the other.

This species has generally been said to be abundant on the coast of Ireland in the winter season; we are however informed by Sir William Elford (whose attention to the subject of ornithology gives effect to his observations) that it is certainly a mistake; the Brent being commonly called by the same name, has probably occasioned the assertion, for that bird is taken in the bay of Belfast, and other northern parts of that island in great abundance, but he never could discover the *Erythropus* amongst them.

A specimen sent us by Mr. Anstice, from Bridgewater, in the month of February, 1809, is at this time alive and in high health. It appears a remarkable docile bird, was immediately reconciled to confinement with other aquatic birds, and partook of their food the instant it was liberated from the basket in which it was sent, and had then been taken (by means of a shot-wound) only a week or ten days.

A large flock of these birds were observed on Slapton Ley, in the winter of 1801.

A specific character belonging to this species which we have not noticed on record, is a callous protuberance, or blunt spur upon the elbow, or front joint of the wing.

GOOSE-BLACK. Vide Goose-brent.

GOOSE-BRENT. Anas Bernicla.

Black-Goose. Rural Sports. ii. t. p. 465.

Bewick Br. Birds. ii. t. p. 311.

PROVINCIAL.

Horia or Horic-goose. Quink-goose. Rood-goose.

This appears to be a much more plentiful species than the Bernacle, and sometimes migrates from the north in such congregated myriads as to starve each other. The

The late Mr. Boys, of Sandwich, informed us that in the year 1739-40, when these birds were so abundant on the continent, (especially on the coast of Picardy, where the inhabitants were raised *en masse* in order to destroy them) they were so plentiful on the coast of Kent, that they were in so starving a condition, as to suffer themselves to be knocked down with stones and sticks; and were carried in carts to the neighbouring towns, where a purchaser was allowed to pick and choose for six-pence a-piece.

We learn from the same respectable source, that in the year 1803, they were innumerable about Sandwich; and were so miserably poor, and debilitated, as not to be able to rise after alighting, and many were taken by hand.

"It is remarkable," says Mr. Boys, "not a Bernacle, "grey-lag-Goose, nor Bean-Goose have been seen with this "superabundance of Brent-Geese, and yet the weather has "been sufficiently severe to compel the Hooping-Swan so "far south."

It is a curious circumstance that such occasional excesses in migration of some particular species, should occur so locally. Thus when the Brent was so plentiful on the eastern coast of the kingdom, not a single instance occurred in the west to our knowledge; yet in the year 1800, about Christmas, they were common, contiguous to the coast of South Devon.

GOOSE-CLAIK. Vide Bernacle.
GOOSE-COLE. Vide Corvorant,
GOOSE-GREY-LAG. Anas Anser.
Bewick Br. Birds. ii. t. p. 292.

In the *Environs of London*, by Mr. Lyson, an anecdote is given of the partiality of a Canada Goose for a yard-dog; the Goose could only be separated by force from her canine friend, and after his death, fell a sacrifice, by endeavouring to possess

possess that seat in the kennel where she had so long been fostered with the kindest friendship by his predecessor.

A similar attachment we recollect of the China Goose, the male of which had beenkilled by a young pointer. Ponto (for that was the dog's name) was most severely punished for this misdemeanor, and had the dead bird tied to his neck. The solitary Goose became extremely distressed for the loss of her partner and only companion, and probably having beeu attracted to the dog's kennel by the sight of her dead mate, she seemed determined to persecute Ponto by her constant attendance and continual vociferations; and after a little time, a strict amity and friendship subsisted between these incongruous animals; they fed out of the same trough, lived under the same roof, and in the same straw-bed kept each other warm; and when the dog was taken to the field, the inharmonious lamentations of the Goose for the absence of her friend were incessant.

M. Cuvier has published a brief description of a bird produced between a Swan and a Goose, which in fact amounts to its being a perfect Goose in every thing but size like its mother, which it greatly exceeds.

The common Goose from which our domestic breed is descended, must have been domesticated many centuries; and it is rather surprising that many other species of the larger birds, especially of the aquatic kind, have not been brought under the dominion of man.

The common or Grey-legged Goose was formerly indigenous to this country, and bred in the then vast, extensive, and impenetrable swamps and fens contiguous to the eastern coasts of the kingdom. The labour of man, by draining and cultivating these fens and morasses, has intirely depopulated these places of their native inhabitants; but he has wisely selected the Goose from the number of the feathered tribe that once roamed at large over these extended flats, and by domestication,

domestication, and conversion into private property, has made it prove to him a source of real wealth. These swamps, which in more barbarous times yielded a scanty subsistence to the natives, by the promiscuous capture of such birds, are now teeming with them in a domesticated and highly improved state.

Those who have never witnessed the abundance that are fed in some of the fens in Lincolnshire, can form no idea of this real golden treasure, nor of the beauty of the innumerable flocks that enliven those dreary tracts, as yet too moist to afford wholesome pasture for sheep.

In few countries do the value of Geese appear to be fully appreciated, for, with proper management, few animals are of greater worth. If we consider that these birds not only afford us a wholesome but a delicate food; their smaller feathers and down contribute so largely to our nightly repose; their quills, so common in use for transmitting our thoughts to the present and future ages, we may truly estimate their intrinsic value, as little inferior to the sheep; for the *wool* of the Goose is equally valuable, and the flesh as eagerly sought after. Upon the whole therefore a Goose is a highly profitable animal, little inferior to that of a sheep, in certain situations; and thousands are annually bred where that animal could not exist.

If the produce of the feathers, plucked three times a year, and the quills twice; and that upon an average each Goose produces six or seven young for the market annually, are considered; how much short they are of the profit yielded by an ewe in the same time, we shall leave to the calculation of the agriculturist.

In most parts of the kingdom, the Goose is an appendage to the farm-yard, and being a hardy bird, and subject to few distempers, she requires no care, is neither fed with hay nor corn, and consequently her value is clear profit.

In

In the west of England, where Geese are plentiful, but not associated into large flocks, they are neither cultivated nor managed with advantage; for though, in some parts of Devonshire, the poorest persons would deem themselves poor indeed, that could not sleep upon a feather-bed; yet it is not the custom in that county, to extend a profit upon these birds, by shearing or plucking their feathers, although of double the value of the wool of the common sheep of that county.

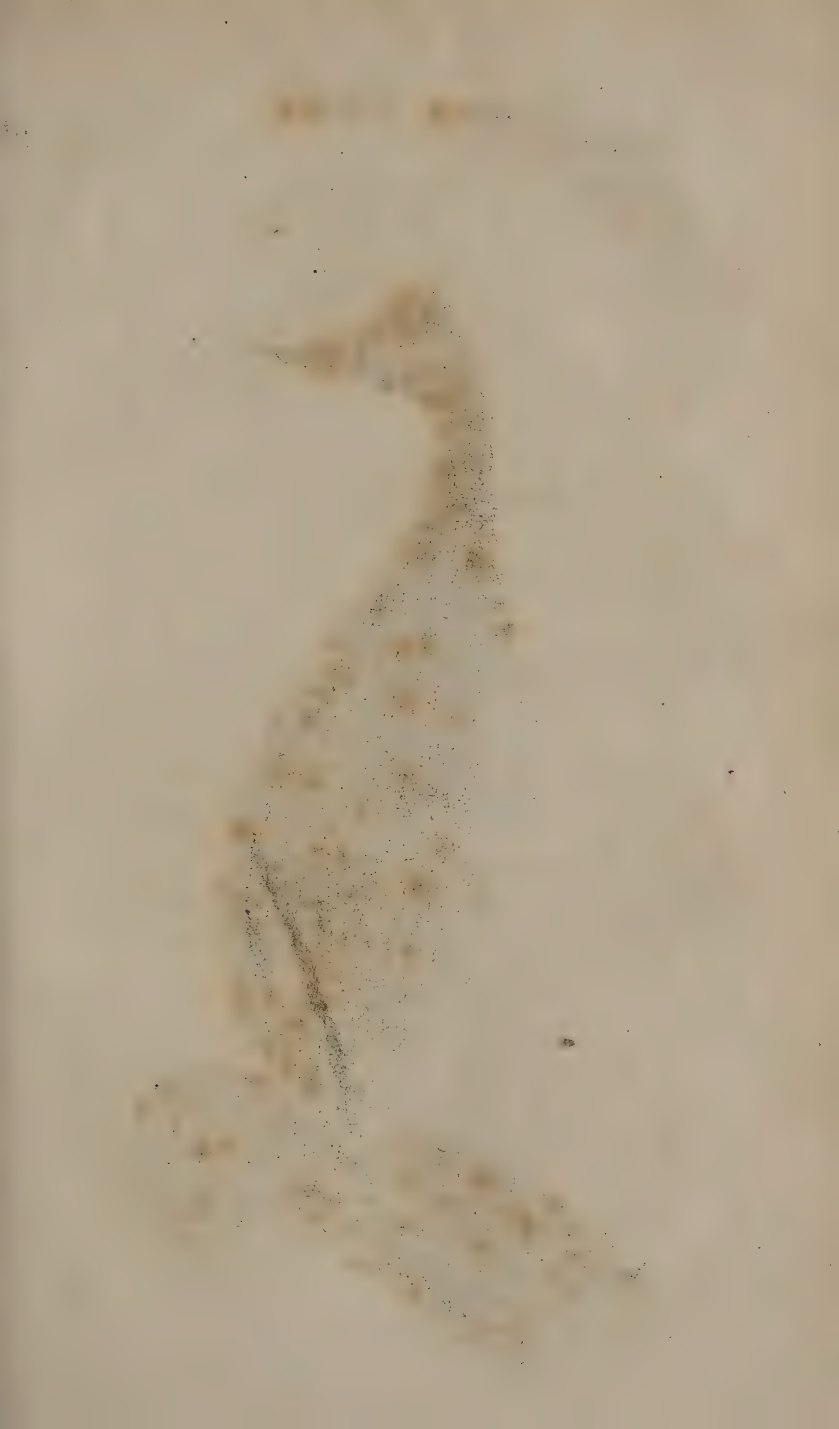
GOOSE-HORRA, or HORIE, vide Goose-brent.
GOOSE-QUINK, vide Goose-brent.
GOOSE-RAIN, vide Diver-red-throated.
GOOSE-ROOD, vide Goose-brent.
GOOSE-ROUTHEROOCK, vide Goose-Bernacle.
GOWK, vide Cuckow.

GREBE-BLACK-CHIN. Podiceps hebridicus.
Br. Miscel. p. 19. t. 70.

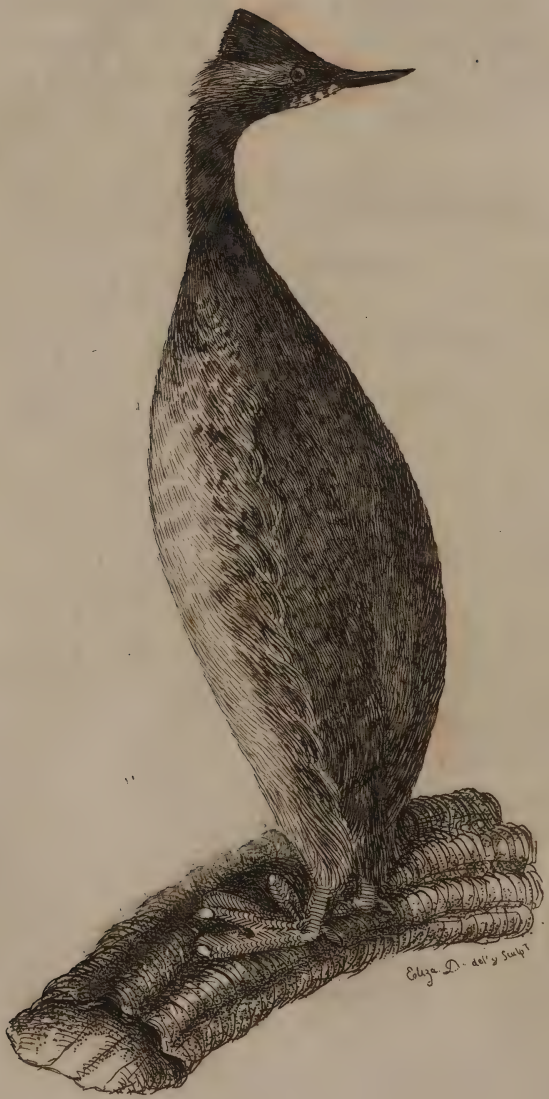
This bird, the description of which originated with Mr. Pennant, was considered rather larger than the Little-Grebe, and a distinct species, and was described from a specimen noticed in the Hebrides.

In the *British Miscellany* there is a representation of the male and female of this supposed species, accompanied with the nest and eggs, which were taken in a pond on *Chelsea-common*, in June 1805. These appear to accord with the description given of the Black-chin-Grebe; and we have another now before us, which must be considered as similar; but we cannot avoid expressing an opinion that these, as well as that originally noticed by Mr. Pennant are no other than unusually dark varieties of the Little Grebe.

It should be recollected, that the *Podiceps minor* is subject to a considerable variation in colour as well as size; and that in some the ferruginous, in others the dusky predominates; and



EARED GREBE.



and that the gradations can be traced to the very dark specimens that have been considered as distinct.

Ours is rather a small specimen, being (as we believe) a female: the length is six inches and a half.

The bill is black with the point very pale: irides reddish: the upper part of the head, and the hind part of the neck, as well as the chin, are dusky-black with an olivaceous tinge: the cheeks, forepart and sides of the neck, chesnut: the whole bird besides, dusky, mixed with ash-colour on the under parts; the rump mixed with ferruginous; the first nine quill feathers pale brown tinged with rufous; the secondaries white on the inner webs; legs and feet dusky-black with a greenish tinge.

This bird was shot the latter end of August in a pond close to the river Avon in Devonshire, and presented to us by our ornitholigical friend the Rev. Mr. Vaughan.

Our specimen is considerably darker beneath than those figured by Mr. Sowerby are represented to be, and not spotted; and the chin is more inclining to black.

Mr. Pennant's bird was thought to be larger than the Little Grebe; Mr. Sowerby's is said to be smaller, and ours is a medium.

These very dark varieties are not common, but we suspect many would be found verging towards it in the summer months, when the older birds are in their fullest plumage.

GREBE-EARED. Podiceps auritus.

In the former part of this work it will be observed (under the head of Grebe sclavonian) some doubts were expressed concerning the distinction of these birds as species; we have since had an opportunity of examining and comparing a fresh specimen of the *auritus* with our *cornutus*, which has enabled us to decide most clearly that they are perfectly distinct.

So remarkably scarce do both these species appear to be, that amongst our numerous friends, only one instance of each have come to us in a fresh state.

To Colonel George of Penryn in Cornwall we are indebted for a very fine male specimen of the *auritus* shot on the 15th of March, 1811, so that we may fairly conclude, as it was so near the breeding season, that its plumage is fully matured; we shall therefore give a description of this bird, and then point out the material distinction between the two species.

The weight was one pound: the length thirteen inches and a half. The bill is black, an inch in length to the feathers on the forehead, a little reflected; the upper mandible is nearly straight at the point, the lower mandible decreases at about a quarter of an inch from the end, and from thence forms a conic point, which makes the bill appear to reflect more than it actually does: the lore is black: irides bright scarlet: head and neck black: chin spotted with white: the sides of the head furnished with long slender yellow feathers commencing behind the upper part of the eye, and extending downwards for more than an inch; these flow backwards, the lower series are shaded to a deep orange; the black feathers on the forehead and crown are long, and terminate abrubtly as if cut with a pair of scissors, forming an obtusely conic crest: the back, scapulars, and coverts of the wings dusky black: the first six quills are dusky-black; the three next black only on the outer web, the inner web white; the thirteen succeeding are wholly white: the lower part of the neck before, is mottled black and white: the sides of the breast, and sides of the body, are similarly marked, the latter interspersed with ferruginous: legs and feet dusky, bluish cast, pale on the inside of the former.

Upon comparing this with our *cornutus* (which is also a male) the distinction of the species is at once made evident. The bay feathers which adorn the sides of the head, in the

cornutus

cornutus originate from the base of the bill, pass over the eye, and are not at first longer than usual, but increase in length gradually from behind the eye, and instead of flowing backwards, ascend, and stand above the head like ears; these also spread gradually as they recede backwards. The *auritus* on the contrary has these feathers in a very different situation for they originate from a broad base behind the eye, extending partly towards the neck, and are long from the commencement; they are in fact a tuft of long yellow feathers that cover the black ones on the sides of the head; whereas in the *cornutus* there are no black feathers beneath, and the feathers on the cheeks, and nape, are much longer, giving the head a much more tumid appearance.

Besides this essential difference in the aurited feathers of the two species, the general plumage is different, as may be observed by comparing the description. But whatever variety of plumage these two species may assume, that gives them a nearer approach to each other, and might leave existing doubts in the minds of some Ornithologists, the shape of the bill alone will determine the species, and must set at rest all discrepancy of opinion. The bill of the *cornutus* does not reflect, but both mandibles are equally sloped, forming the point regularly conic; whereas the *auritus* has the upper mandible straight at the apex, and the under one sloped to form the bill into a point.

GREBE-GREAT-CRESTED. Vide Grebe-crested.

GREBE-LITTLE. Podiceps minor.

This species appears to be subject to considerable variation in colour, from a light brown, to a dusky-black on the upper parts; and from a silvery white to dusky beneath; the cheeks also in some are only tinged with ferruginous; in others that colour extends over the sides of the head and neck, more or less bright; and all the intermediate stages are to be found;

and in a further advanced stage where the chin becomes darker, or dusky, brings it to the Black-chin Grebe of the *British Zoology*.

See Grebe-black-chin.

GREBE-RED-NECKED. Podiceps rubricolis.
Bewick Br. Birds, t. p. 152.

Early in the year 1809, five of these birds were seen together on Slapton Ley, four of them were killed, two of which were eaten, or attempted to be devoured by the natives, but finding them extremely rank they threw away the third; and the fourth fortunately came to our hands, through the means of another ornithological friend, the Rev. Mr. Holdsworth.

This gentleman, who has paid particular attention to the habits of such birds as have fallen under his notice, assures us, he had frequently observed these birds on wing, and from their singular manner of flight, considered them as birds he had never before seen; but it was some time before he could procure a specimen; and his utmost exertions could not save either of the others from destruction, but only fragments that shewed their actual existence.

The bird in question, although a male, had not the least appearance of the rufous neck, and was of course either a young bird, or in its winter plumage; and in that season may be destitute of such mark.

Those who may have considered this species as belonging to the Crested Grebe, cannot possibly have compared them.

Our specimen was shot on the third of February. It weighed twenty-three ounces: the length seventeen inches. The bill is an inch and a half long to the feathers on the forehead, of a dusky colour, with the base and under part of the lower mandible, and a streak from the nostrils to the corner of the mouth of the upper mandible, bright yellow; irides

irides hazel : lore dusky. The top of the head, back of the neck, and back, dusky, the feathers on the last slightly margined with cinereous : the chin, throat, and cheeks white, the last dingy white, extending on each side towards the back of the head : the under part of the neck brown, with a slight tinge of rufous ; but the lower part of the neck, upper breast, and the sides of the body, white, obscurely spotted with dusky ; the rest of the body beneath is white : the scapulars, rump, prime quills, and coverts of the wings all black, except a patch of pure white on the shoulder, or junction of the wing with the body, and ridge of the wing : thirteen of the secondary quills are white, the two first, and two last, with more or less black on their outer webs, the others pure white ; the tertials are black : legs and feet pale greenish-yellow, the former, as well as the webs, dusky on the outside.

Upon dissection, the stomach was found to be distended with feathers and small seeds. Being struck with so singular an appearance, we carefully washed and dried the contents of the stomach, and by that means discovered that the feathers had been collected from its own body. For what purpose could such a quantity have been swallowed, since few of the piscivorous birds disgorge the refuse like the Falcon tribe ? such a quantity can scarcely be supposed to have been taken into the stomach, in the act of cleaning and dressing its plumage, unless they had been long collecting, and were impassable ; many indeed were completely comminuted, and fit to pass into the intestines. This singularity has been observed also in the Crested Grebe.

There was nothing remarkable in the *trachea* except that the *branchi*, or divarications, were hard and bony, particularly on the inside, where there was scarcely any membranous divisions, and consequently little or no flexibility.

We shall again repeat that notwithstanding Mr. Pennant, and some others, may have doubted whether this was not a

variety

variety of the Crested Grebe, we can, from a comparison of the birds, declare they are perfectly distinct. This is smaller, much shorter, and a more truss shaped bird, in size between the Dusky and the Crested species; the neck is much shorter, and the bill is materially different. In fact there is full as much difference between these, as between the Dusky and the Little Grebe, independent of the plumage, which in all its variations is essentially distinct.

GREBE-SCLAVONIAN. This is now ascertained to be perfectly distinct from the aurited species. Vide Grebe-eared.

GROSBEAK-WHITE-WINGED.

Loxia falcirostra, Ind. orn. i. p. 371.

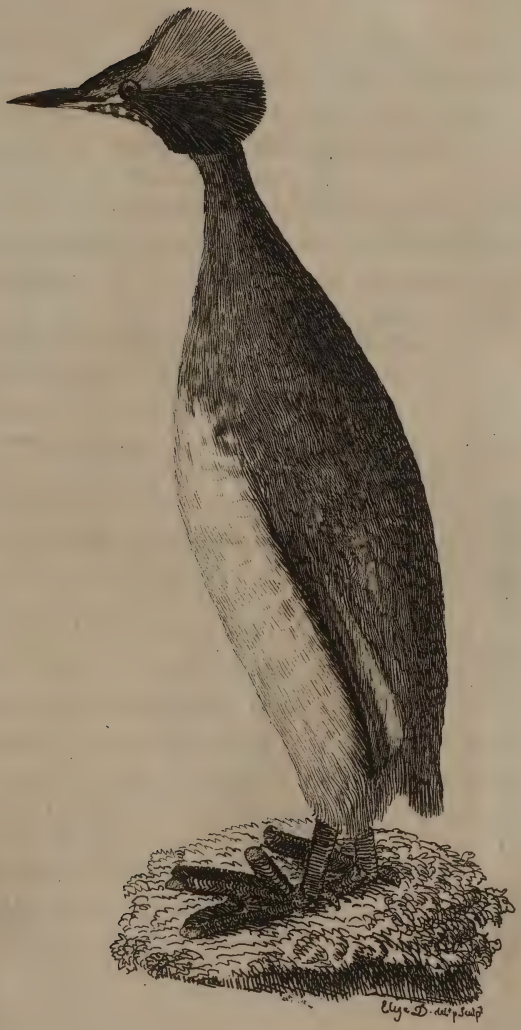
White-winged Cross-bill, Lath. Syn. iii. p. 108.

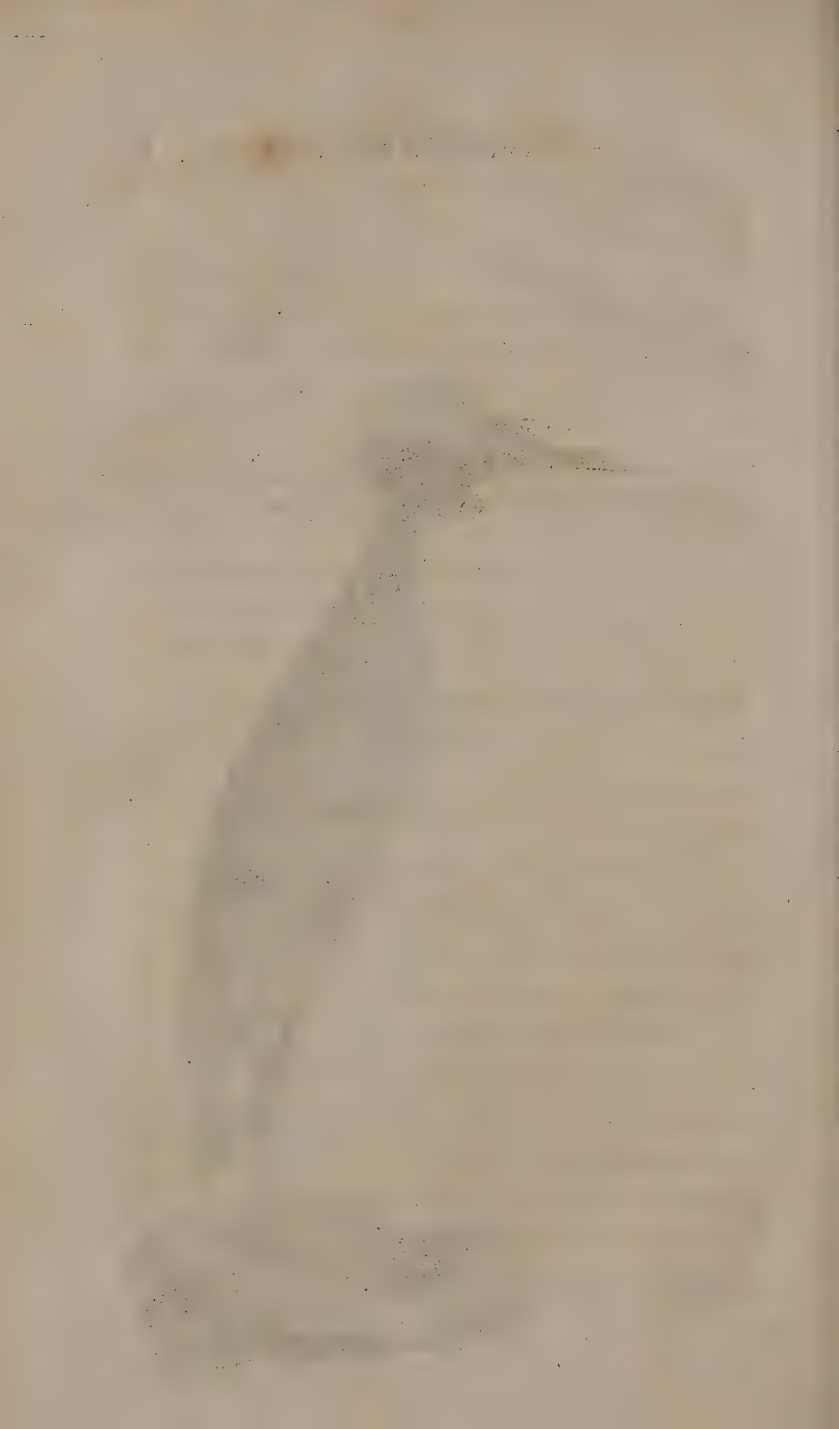
In the extract of the minute-book inserted in the VII. vol. of the *Linnean Transactions*, mention is made that a female of this species was shot within two miles of Belfast in Ireland, in the month of June, 1802, communicated by Mr. Templeton, of Orange Grove, near Belfast.

We cannot help expressing a doubt whether the bird in question was any other than an accidental variety of the common Cross-bill, *Loxia curvirostra* with some accidental white on the wings, a circumstance attendant on most species of birds. And we are the more inclined to suspect this was the case since there is no other distinction between the two species, than the two white lines across the wings of the American bird; and were considered by Mr. Pennant as the same. If, however, it actually was the *Loxia falcirostra*, we can have no doubt that it must have made its escape from a cage, as that species is wholly confined to America, from whence we do not believe any birds migrate into the southern parts of Europe.

Similar captures have frequently been made in England, to

SCLAVONIAN GREBE.





our knowledge. We recollect a rich South American ship was stranded at Laugharn on the coast of Caermarthenshire, and a great many caged birds of that country obtained their liberty; many of these were afterwards shot at a considerable distance from the fatal spot; the game-keeper belonging to Mr. Vaughan, of Golden Grove in the same county, killed several of these birds.

A Painted Bunting *Emberiza ciris* was taken alive on Portland island in the year 1802, having doubtless made its escape from on board some ship going up channel, or that came to anchor off Weymouth. This bird we saw alive in the possession of Mrs. Steward of that place.

The golden-breasted Trumpeter, *Psophia crepitans*, and the American Quail, or Maryland Partridge, have both been taken in England; of the latter, a male was shot near Mansfield, by Mr. Harrison, and was afterwards sent to Lord Stanley, from whom we received the information.

Although foreign to our subject, as no one can suppose a Brasilian bird can be introduced into the British catalogue! yet as the Trumpeter was taken at large, we shall state the circumstances as related to us by letter from Lord Stanley.

His Lordship says "The Trumpeter was found in the neighbourhood of my father's, in Surry, in the habit of attending a farmer's yard, whether it had come of itself and associated with his poultry. When first observed by us, it was on occasion of Lord Derby's hounds running through the yard, when it joined, and the servants told me, kept up with the hounds for near three miles. I think they said it did so more than once. When I first saw it, it was picking up some scraps of meat, (of which it seemed very fond) in our back yard, whether I found it had followed some of the farmer's children, and liking its new situation, remained there. It was very small, and evidently a young bird, and not very handsome, but as a curiosity Lord Derby made inquiries about

about it, and finding that it could not be traced to its right owner, a small present to the possessor put us in possession of it." His Lordship also informed us that it died on its journey into Lancashire.

This interesting account in the biography of the Trumpeter should not be lost, and therefore we trust this little digression in order to bear record of it, will be excused.

The American Quail has been turned out in some parts of the British Empire, with a view to establish the breed, but we believe without effect. The late General Gabbit liberated many on his estates in Ireland, but in two years the breed was lost.

These and various other instances might be mentioned; but such not bearing a shadow of self-migration must not be introduced into the catalogue of British birds. If such accidental fugitives were introduced into the *Fauna* of this country, we might soon expect to find our catalogue swelled with quadrupeds and amphibiæ, as well as American and equatorial birds.

The Tortoise, *Testuda græca*, has already found its way into the catalogue of the *indigena* of British Zoology, and we may expect that the Rattle Snake and Alligator may also make their escape from their prisons, and ramble like the Grecian Tortoise, which having been taken in the cultivated parts of Devon, has been considered as a native.

GROUS-BLACK. Tetrao Tetrix

Bewick B. Birds, i. t. p. 310. Rural Sports, ii. t. p. 413.

Mr. Pennant in his supplement to the *Arctic Zoology*, says, the Black-Cock has been known in Sweden, to breed with the common domestic Hen, which produced a barren spurious generation.

About Avemoor in the Highlands of Scotland, the Black-Cock is called Kelochdoe (Thornton's Tour, p. 159.)

This

This bird does not appear to bear domestication well, nor to breed in confinement; many attempts have been made by the present Lord Carnarvon, (on whose property in the west of England, it still ranges at large,) but with no success: and others that were in the menagerie belonging to the late Lord Carnarvon, were as sterile.

The females, though short-lived in confinement, appeared to bear it better than the other sex.

These birds which formerly were abundant over the mountainous, heathy, and woodland parts of Devonshire and Somersetshire, are greatly reduced, and would long ago have been extirpated, was it not for a few of the most extensive properties being highly preserved. But notwithstanding every precaution, they do not increase, even where the hand of protection is held out to them. The encroachment of cultivation upon their heathy range, must limit their numbers, and in time this noble species will be totally lost in the southern parts of the island, in spite of the attempts of individuals to prevent it. On Dartmoor and its neighbourhood, this bird is now become extremely scarce. In Sedgemoor and the neighbouring hills, especially those belonging to Lord Carnarvon and Sir Thomas Acland, they are in the most abundance. In the autumn of the year 1808, his Lordship thought there were about twelve or fourteen packs, or broods upon his extensive moors at Pixton, and at least that number of old cocks.

The chain of heathy hills that still protect these birds, extends eastwards from the forest of Exmoor in Devon, into Somersetshire, but these are interspersed with cultivated ground, to which they sometimes ramble and are destroyed; so that were it not for the very extensive, and almost impenetrable woods that clothe the vallies and sides of the hills, these noble birds could not long exist.

The same tract of extensive woods and waste, that affords protection

protection to the Black Grous and Pheasant, also gives shelter to the only few remaining of that royal animal the Stag, which are now to be found in a perfect state of nature, on the south side of the Tweed; and of these it is computed there are now about thirty killable, or of four years old, independent of hinds, within the district before specified.

Before we quit the Black Grous, we must remark, that it still exists in Hampshire and in Staffordshire. The Rev. Mr. Dickinson of Blimhill, in the last mentioned county, assured us that a pair visited his parish in the year 1802, and fed almost entirely on acorns; and that in Cannock Chace in that county, these birds are frequently observed to feed upon hawthorn berries.

We must here notice that our astonishment was not a little excited, to observe in a very respectable publication, the following remark. "It is the general opinion of sportsmen, that the Grous species have no tongue, but (adds the author) this could only have arisen from their being viewed when expiring, or after death; for upon inspecting the gizzard, the tongue will be found to have retreated there with all its ligaments."

We need scarcely remark, that an assertion so unnatural, and so unphilosophical, as that a bird should be able in the last act of deglutition to force its tongue out by the roots, and swallow it, is not more founded in fact than that they have no tongue. The naturalist, however, will find no difficulty to discover the tongue in all the species belonging to this genus in its proper place, whether dead or alive.

GROUS-GREAT. Vide Grous-wood.

GROUS-RED. Tetrao Scoticus.

Bewick B. Birds, t. p. 313.—Rural Sports, ii. t. p. 416.

In severe winters, moor-game comes lower down the mountains in Scotland, and flock together in prodigious numbers:

in

in 1782 and 1783, three or four thousand assembled, (Thornton's Tour, p. 205.)

The same author (p. 131) in his sporting marches, encamped at the source of the Dalmon, at the foot of an immense hill, called Croke Franc. "The game on these "moors (says our author) is innumerable. In a mile long, "and not half a one broad, I saw at least one thousand "brace of birds," (meaning Red Grous, or Moor-game.) Such days of plenty will scarcely ever be seen again; since the communication between the two countries has been facilitated by good roads, ready conveyance, and excellent accommodation, parties have been continually formed in England to make sporting tours in the Highlands of Scotland, and slaughter is the word.

At Mr. Grierson's of Rathfarnham, County of Dublin, in 1802, a brace of Grous which had been confined for three years hatched a brood of young. (*Rural Sports.*)

Is said to have bred in the menagerie of the Duchess Dowager of Portland. (Id.)

As a further and more recent proof that this bird will breed in confinement, Lord Stanley assures us that a pair of Grous which had been confined two years by a person who paid little attention to them, had produced many eggs. This circumstance made his Lordship desirous to obtain the birds, in which he succeeded, and that last year (1811) the female laid ten eggs, which she incubated, and brought out eight young. These infant birds from some unknown cause, probably a defect of natural food at that tender age, did not live many days. The old birds feed on grain and oatmeal like others of the gallinaceous tribe. They are still remarkably shy, and are as little disturbed as possible, in order to induce them to breed again. If Ants' eggs, Grasshoppers and other insects cannot be procured in sufficient abundance, alum-curd, or hard boiled egg, as animal food, is perhaps as

good

good a substitute for insects as can be administered, and we recommend it to all persons who wish to rear any young birds of a similar nature. But if Grasshoppers can be obtained, they are eagerly devoured, and for the first month the best food that can be given.

A mottled brown and white variety very much resembling the summer plumage of the Ptarmigan, was shot in Lancashire, in the month of August. (Lord Stanley.)

This bird is more of a true antient Briton than any other of which we can boast, and as such it ought to be protected and revered ; for strange as it may seem it does not appear to have found its way to any other part of the world, but is exclusively of British origin, and continues wholly attached to the British Empire. Inhabiting the most dreary, and inhospitable parts of the three united kingdoms, contented with the native produce of such uncultivated regions, it never by choice approaches the habitation of man, to riot in the fruits of his labour. It has not even extended into the Shetland island, but has reached the Orknies, its utmost extent northwards.

Linnæus considered the Red Grous as a variety only of *Tetrao Lagopus* or Ptarmigan ; and as late as the publication of the thirteenth edition of the *Systema Naturæ* by Gmelin it has so been continued. Some of the French Naturalists gave it the trivial name of *Scotica*, probably from first having heard of it as a native of that part.

GROUS-WOOD. Tetrao urogallus.

Bewick B. Birds, i. t. p. 307.

Rural Sports, ii. t. p. 411.

The Wood-Grous is found in Sweden, where it inhabits the fir woods, and is said to be so extremely shy as to be only approached while it is singing, at which time the male has a convulsive motion in his head and eyes, which prevents him

him from seeing or hearing any thing. This song continues for a minute each time, and enables the sportsman to approach by degrees, taking care to hide himself behind a tree during the interval of the song, until he gets sufficiently close to fire.

This bird we believe is now extinct in the British Dominions; but we have received both sexes from Norway, perfectly fresh and fit for the table, where they are in general much more estimated by the epicure than if they were preserved in their feathers, considering the best stuffing to be that of stuffing themselves.

The female has been said to possess only sixteen feathers in the tail, whereas the male has eighteen. We are enabled to assert that both the sexes have the latter number.

Two females lately examined weighed the same within six ounces, the largest was three pounds eleven ounces; the length twenty seven inches. In the crops of these birds were a species of berry similar to the Cranberry, called in Norway *Tytteboer*: these with the tops of the plant, and the common Heath, filled the crops. The gizzard which is extremely strong and muscular contained a vast quantity of crystal-like pebbles intermixed with the macerated food.

The male of this species is in Norway known by the name of *Aarhanen*; the female is called *Tiur*.

GUILLEMOT-BLACK. Uria Grylle.
Bewick Br. Birds, ii. t. p. 179.

This bird in the Orkney and Zetland islands is called Puffinet, Taiste, Toyst, Tysty, or Tyste. It remains there the whole year becoming speckled with white in winter, and is then considered as the young only, left behind, and that the old migrate.

It continues the whole year in the bay of Dublin, and is there common. *Lath. Syn. Sup. ii. p. 265.*

Mr.

Mr. Henry Boys observed both old and young in the month of August, at Fowlesheugh near Stonehaven in Scotland. The female measured fifteen inches and a half in length; in this there was no white except on the wings; but in the young birds the under parts were white streaked with black, as was the white in the wings: legs dusky brown: the tail consists of twelve feathers.

The Black Guillemot is amongst the few feathered inhabitants of the North cape of Lapland (*Acerbi.*)

GUILLEMOT-FOOLISH. Uria Troile.
Bewick Br. Birds, ii. t. p. 175.

PROVINCIAL.
Marrot, Strany, Lungy, Skuttock.

In the latter end of January 1805, as cold and severe a winter as for many years had been experienced in the West of England, several of these birds were shot in the estuary of Kingsbridge, some of which we examined; and one that was dissected proved a female, and weighed about thirty ounces.

These had the exact plumage of those which frequent our rocks in summer, and in every respect so exactly corresponded with the summer dress of the Foolish Guillemot, that it should seem to prove beyond all doubt, that the Lesser Guillemot is perfectly distinct, and that the Foolish Guillemot at no season is differently marked. The colour even at this time is not black as in the Lesser species, but of the usual dark brown.

This is the only instance that has occurred to us of this bird having been taken on our coast in the winter, but it is a circumstance fraught with information.

After having related what is so much in favour of the distinction of the species, it behoves us to record faithfully, all

all those circumstances that may militate against such an opinion. Of such the following stands foremost:

In June 1805, we examined a young Guillemot that was full grown, excepting the wings and tail; its weight was thirty-one ounces: length, sixteen inches and a half. The plumage on the lower part of the back and rump, brown mixed with grey, some of the lesser coverts of the wings the same: the feathers of the tail margined and tipped rufous-white: the upper part of the neck before, and the throat, as far as the dark colour usually extends, are mottled black and white; these markings pass round the sides of the head behind the eyes, and meet behind the nape in an obscure narrow band; the feathers on these parts being white tipped with black, not distinctly marked, some black and others white. The rest is like the Foolish Guillemot, but darker about the head and hind neck. The inside of the mouth yellowish flesh-colour: length of the bill to the nostrils one inch and a half; to the gape two and three quarters.

The extraordinary weight of this bird, (admitting it to be the young of the Foolish species, and of which there can be no doubt, as no other is known to breed on the coast where it was taken,) can only be accounted for by supposing that it was highly fed, while the old birds at this season are more exhausted; but we have had old birds of superior weight sometimes.

Several of these exactly similar in markings, were shot at the same time at the mouth of Salcomb bay, on the coast of South Devon.

It now appears that this species like the Razor-bill is at first, in its nestling feathers like the parent birds, destitute of any white about the head and neck, but that after they take to the water, and before they can fly, a partial moulting takes place, and the throat, and fore part of the neck, become spotted with white feathers tipped with dusky, and which in

a slight degree extends round behind the upper part of the neck. Now it must be remarked by every Naturalist, that these newly-acquired white feathers tipped with dusky, must be again cast, and be replaced by entirely white ones, in order to render this bird similar in plumage to the Lesser Guillemot; a circumstance if not impossible, is highly improbable. Besides, if these two species were at any time by accident to be found alike in plumage, no one who has had the opportunity we at this moment have, of placing all the species before us, the two Guillemots and two Auks which have caused such discrepancy of opinion, together with their young at different ages, would hesitate a moment in deciding the matter.

The size and weight of the spotted young Guillemot, is essentially greater than the Lesser Guillemot is ever found to be; the neck is longer, and as an especial mark of distinction, the bill of this young bird is full one-third longer, and is furnished with an indenture in both mandibles near the tip. This is an obvious mark of distinction not we believe before noticed in the Foolish Guillemot; and of which the Lesser Guillemot is wholly destitute in the under mandible, though on the upper, nearer to the point, there is a very slight inclination to an indenture.

The circumstance of variation of colour in particular parts of the plumage in some of these species, especially the change to that of white, is well exemplified in the Black Guillemot, which has been found to vary so much, that the older Naturalists had formed of them several species; but no Ornithologist of the present day can doubt the identity of the same bird in all its various plumage, by size, and other immutable characters.

We consider it extremely fortunate to have obtained the Foolish Guillemot in the midst of winter (a rare occurrence) and at the same time the Lesser Guillemot to compare with the young of the former, having the speckled neck. The

size

size and weight so different, the length and structure of the bill so dissimilar in the two species, and so exactly alike in the old and young birds of the former, set all controversy at rest upon this subject. These birds are as perfectly distinct from each other as the Lesser is from the Black Guillemot; and we may be assured that the Black-billed Auk is as distinct from the Razor bill as it is from the Little Auk; the invariable difference in size, as well as other circumstances related under their proper heads, do not leave even a shadow of doubt.

The eggs of this species of Guillemot, and those of the Razor-bill, when boiled hard, are in some parts much esteemed.

GUILLEMOT-LESSER. Uria minor
Bewick Br. Birds. ii. t. p. 177.

Having enlarged so much upon the identity of this bird as a distinct species in treating of the Foolish Guillemot, it only remains for us to remark, that this species together with the Black-billed Auk, *Alca pica*, are found in vast abundance in winter, in the bays on the coast of Scotland, extending even to the Orkney and Zetland islands, but particularly in the *Frith* of *Forth;* and at the same time being so sparingly scattered over the southern parts of the kingdom, evinces that they are properly natives of the more northern regions, and retire only from the icy seas, to such parts as may afford them subsistence. Thus they are contented with a boreal station, even in the colder months, and never seek a southern region, but mostly continue on our northern shores, where they are never impeded by ice from diving after their favourite prey, the Sprat, which is there found in abundance throughout the winter. The Foolish Guillemot, and the Razor-bill, on the contrary, are indigenous to this country, breed on most of our higher cliffs that form a barrier to the ocean, and after performing the great dictates of nature, invariably leave our

shores, and retreat to some more southern climate; nor is one to be found amongst the Lesser Guillemots and Black-billed Auks, in the winter season so far north as Scotland, an accidental maimed bird excepted, and only one or two instances have occurred, in which the Foolish Guillemot was found on the most southern part of the island, (Devonshire) at that season. Thus has nature assigned to these birds their limited stations, by forming them of different temperaments: the more tender species that winter in the southern parts of Europe, and on the coasts of Africa, return with the spring to our temperate climate, and as it were push on the hardier species to their northern destination. Thus the Lesser Guillemot, and Black-billed Auk, in part supply the place of the Foolish Guillemot and Razor-bill during the winter, and the reverse is the consequence of our nearer approach to the sun.

We shall now sum up the account of these hitherto ambiguous species, for the consideration of those who may continue to be of an opinion that the Lesser Guillemot, and Black-billed Auk, are only the young of the Foolish Guillemot and Razor-bill.

In the first place, it is contrary to every principle of reasoning upon natural causes, to suppose that when the two last retire in the autumn, from the southern parts of England, they should go to the north of Scotland, and be converted by a change of plumage into the two former. The supposition that any bird should migrate northward to pass the winter, is in direct violation of the actual cause of the propensity to migrate. Every species of animal that shifts its quarters with the seasons, breeds in the higher, and passes the winter in the lower latitudes. Those who may have formed an opinion that the two first are the young of the others, should be asked to produce an instance of so unnatural a case as that of all the young of any species remaining behind to winter in a northern

northern country, while the old birds seek a more southern climate. Besides, those who favor such an opinion, must go further, for they must also believe that when the old birds leave England in the autumn, to winter along the shores of the southern parts of the Continent, the young birds take a contrary direction, and accumulate in the north of Scotland, as far as Zetland; in which parts they are infinitely more abundant than any where further south. More need not be said to convince any reasoning mind of the unphilosophical principle of such an opinion. Whatever variation, therefore, may have appeared in the change of plumage of some, for which we cannot so readily account, we may be assured our safest guide is the habits, and that alone must convince us of the difference of the species in question, were all other distinctions wanting. Myriads of Foolish Guillemots and Razor-bills, resort to the lofty promontories of the southern as well as the northern shores of Great Britain; and when these retire, not a Lesser Guillemot, or a Black-billed Auk are to be seen in their place for a month or six weeks and then a few stragglers only, for they are never common in the south of England.

As it has been clearly ascertained that the Little Auk changes its black head and neck, after the breeding season, and re-assumes it again in the spring, there is much reason for supposing the Black-billed Auk, and Lesser Guillemot do the same, as they are equally birds of the same northern regions. It may also be fairly inferred that neither the Razor-bill nor the Foolish Guillemot vary their plumage at any season, since none of the latter which are occasionally shot in the winter, on the south coast of Devon, differ in the least from their summer plumage.

A singular variety of this species was taken alive in the month of March. Its length, sixteen inches. The upper parts of the plumage where this species is usually black, is in

this bird of a pale cinereous brown, the margins of the feathers palest; quills the same, with pale tips; the secondaries as usual tipped with white; the under parts, cheeks, and throat, as usual, white; legs dull orange-brown.

This bird devoured flesh as well as fish, cut into slender pieces, and doubtless would have lived on fresh water, had not some defect existed that caused its capture, and which probably occasioned its death, after ten days confinement in the menagerie. It had in this short time become docile, and came to the side of the pond to be fed; this gave us an opportunity of observing its motions when diving for its food; and it was evident that all its evolutions under water were performed by its wings alone, the legs being thrown back. It is literally flying in water, for the wings have exactly the same action, except that they are not quite so much extended, nor so rapidly moved as when flying in air. By thus converting its short wings into fins, its progressive motion is rapid, and the body is turned quickly by the exertion of one wing more or less than the other, for neither the tail nor the legs, gave it the least bias. It is only on the surface of the water that the legs are used as oars.

GULL-ARCTIC. Larus Parasiticus.

Bewick Br. Birds, ii. p. 239

Lin. Trans. viii. p. 267.

PROVINCIAL.

Scull, Badock, Fasceddar, Scoutinallan, Dirten-allan or Allen.

The arctic Gull is a very rare species in the southern parts of Great Britain, and only accidentally occurs. Mr. Pennant in his *Voyage to the Hebrides* speaks of its breeding amongst the heath, and when disturbed flying leisurely about like the Lapwing.

It is found on the island of Rum; and Mr. Simmonds

(*Linnean*

(*Linnean Transactions*) says "plentiful in the isles of Glass and Scalpa. Nest composed of dry grass, found upon the slope of a marshy hill. Eggs very light-brown, marked irregularly with dark-brown blotches. No external mark of distinction between the sexes."

The little variety to which this species is subject, perhaps renders it difficult to ascertain the distinction of sex by the plumage: indeed in the whole of this tribe there is no material difference in sexual plumage.

A specimen of the Arctic Gull now under inspection, differs somewhat from that which was described in the former part of this work. It has the sides of the head, neck, and throat, buff-colour: the breast white, shaded into a grey, and becoming dark slate-colour on the belly and parts beneath: the upper parts of the body are also dark-slate: the wings and tail black: the legs are yellowish: the knees and the feet as high as the back toe black. The sex could not be determined, but the two middle feathers of the tail are of their full length.

GULL-BLACK-HEADED. Larus ridibundus.
Lin. Trans. vii. p. 284.
Bewick Br. Birds, ii. t. p. 222,
Brown Gull, Lath. Syn. Sup. ii. p. 331. No. 1.
Red-legged Gull. Orn. Dict.

PROVINCIAL.

Pickmire, Black-head, or Hooded-crow.

We have now and then observed this species in the beginning of July upon the coast of Devon, with the full dark coloured plumage on the head, but never in the winter.

These birds we are assured by Mr. Dickinson continue to breed in great numbers about the same parts in Shropshire mentioned by Plott.

Mr.

Mr. Bewick says that they breed at Palinsbourne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, and slugs.

In some of the fens in Lincolnshire they are plentiful in the breeding season, inhabiting the most swampy parts along with Snipes, Redshanks, and Ruffs, whose nests are intermixed amongst the high tufts of bog-grass. The Gulls trample down the grass upon the tops of the tumps, and thus form a place on which they deposit their eggs, and set isolated, each on its own little island, about a foot or more above the surface of the water, or swamp. Thus raised from the surface, they are seen at a considerable distance, and can equally observe the approach of an enemy, and consequently are difficult to be shot.

Amongst the great number we have seen in Lincolnshire in the breeding season, not one was observed without the complete dark-coloured head, and only one or two instances in which there were a few brown feathers on the coverts of the wings, probably belonging to a late brood of the former year. The eggs weigh from nine to ten drams and a half.

As there has been so much confusion and difference of opinion, with respect to this bird in its several gradations of change, before its arrival at maturity, it may not be improper in this place to enter more minutely into this subject; and for this purpose we cannot perhaps more effectually remove obscurity, than by transcribing a paper on the subject, which we had the pleasure to lay before the Linnean Society, and which has been honoured with a place in their Transactions.

"From the very great confusion which seems to have arisen in some species of the Gull tribe, occasioned by a very considerable variation in plumage at different ages and seasons, we trust it will not be unacceptable to this Society, and

and to the critical ornithologist, if from long and strict attention to several of this genus, which for many years have almost daily been presented to our view, we should endeavour to clear away a little more of that mist which has, for so long a period, veiled in obscurity those birds, which are usually known by the names of Black-headed Gull, *Larus ridibundus*, Red-legged Gull, *Larus cinerarius*, Brown-headed Gull, *Larus erythropus*, Brown Tern, *Sterna obscura*, all of the Gmelinian system; and the Brown Gull of the *Second Supplement* to Latham's *General Synopsis*.

The endeavour to elucidate any of the more obscure objects of the creation, is a claim which science has upon the naturalist; in our attempt, therefore, to throw light upon a subject which has caused so many various opinions, we beg leave to say that, from long acquaintance with the objects in question, we have no scruple in asserting, that the three first, and the last, are without doubt, one and the same species, and that the other has been confounded with it.

To those who are not well acquainted with the subject, it may appear arrogant and presumptuous to call in question the opinions of so many respectable authors; but we trust we shall, from an intimate acquaintance with the bird in question, in all its various changes from the young to the adult, be able to prove, and lay before the Society, sufficient grounds of reason for an opinion so greatly at variance with that of so many more able ornithologists.

In the *Ornithological Dictionary*, we thought sufficient had been said, under the article Gull-black-headed and red-legged, to have cleared away the greater part of such obscurity; but we since find in the work of our estimable friend, and one of the greatest ornithologists of the age, which made its appearance about the same time as the former, (from which circumstance, unfortunately, no advantage could be reaped from that valuable source,) that the Brown

Gull,

Gull, with reference to the Brown Tern of some authors, is there given as a distinct species. It does not however appear, that this author saw the bird in question, but that the description was sent to him by a very able naturalist, our late worthy and much to be lamented friend Mr. Boys; and a very accurate description it is. That the bird should have been considered by him, as that which has been so long in obscurity under the title of Brown Tern, as handed down to us by Ray and Willughby, is not surprising; and that Doctor Latham should fall into such an opinion, is not more extraordinary; on the contrary, it was very natural, and possibly this may be the identical bird; though we rather think the Brown Tern is the young of the Common Tern, *Sterna Hirundo*. But be this as it may, it becomes requisite to shew that the bird which now stands as a distinct species in the *Second Supplement* to the *General Synopsis*, under the title of Brown Gull, is no other than the Black-headed Gull in its adolescent state; and it becomes the more necessary to clear up this point, as it is stamped with such high ornithological authority which might lay a foundation for more confusion in this very intricate class.

To point out the errors of our friends, for whom we have the highest regard, would, indeed be a task ill suited to our pen, were we not from long habits of intimate friendship, with both these gentlemen, well aware of the purity of their writings, and that nothing would afford them more pleasure than the furtherance of science, by clearing up the doubts existing, by well grounded facts.

In the former works of our friend Doctor Latham, he had been induced to fall into the opinion of other authors, and made some of the varieties of the Black-headed Gull distinct species. In his *Index Ornithologicus*, however, he has very judiciously brought the *Larus cinerarius* and *erythropus* of Gmelin, together with the *ridibundus*, as mere

varieties

varieties; but suffers the *Sterna obscura* to remain a distinct species, although he expresses a doubt whether it may not be a young of some one of the Tern or Gull genus.

Thus the Doctor had cleared away much of the obscurity; and it only remained to restore the Brown Gull to its proper place, as the young of the Black-headed species, and scarcely differing in plumage from the state in which it is described as the Brown-headed.

Whether the Brown Tern of the older naturalists is a Tern or a Gull, is perhaps a doubt; for as the young of the former do not remain with us long after they are capable of flying, we cannot ascertain their several changes in plumage; though we ought perhaps, to give them credit, and admit it was a Tern, but not a distinct species. So with respect to the Brown Gull, whether it is, or is not the Brown Tern of older authors is of no importance, as at any rate it is an immatured bird, and alike ought to be expunged from the works on ornithology as a distinct species.

Since the perusal of Doctor Latham's last valuable work, we sent him the bird in question, having every mark of that described by him as the Brown Gull; and we believe the Doctor is thoroughly satisfied with our observations upon it.

It is indeed remarkable that a bird bearing such strong marks as the Black-headed Gull, in all the changes, from the nestling to the adult plumage, should have ever been multiplied into so many species, as it is in its various stages readily ascertained by the superior whiteness of many of the prime quill feathers, especially, on the outer webs, and the greater coverts immediately impending them, which is very conspicuous when the wings are extended, and an obvious distinguishing mark from all others, even when flying.

In order to elucidate the subject more clearly, we shall here subjoin a description of the several remarkable changes incident

dent to the Black-headed-Gull, which a long and intimate acquaintance, from daily observation, has warranted us to assert, and from which it will appear evident, that one of those mutations presents the identical bird in question, the Brown Gull of the *Second Supplement* to the *General Synopsis*. In making any part of the history of this intricate class of birds more clear, by endeavouring to bring them into the limits of truly definable distinction, we do not arrogate superior knowledge on the subject, except, so far as favourable situations, and strict attention to a favourite pursuit, have conspired to develope undeniable facts.

Without detailing the various synonyms of authors for this bird in its several changes of plumage, we shall only have recourse to a few quotations, particularly the *Ornithological Dictionary* where references may be found under its various denominations; and to the *General Synopsis* as well as to *Gmelin's Systema Naturæ*, for the more copious. In order to render the subject more clear, we shall begin with a short description of the Black-headed Gull in its first or nestling feathers, or as it first appears on our shores, after having quitted its place of nidification; and trace it through the various changes, till it arrives at full maturity, which we are inclined to believe in this and some other of the smaller species of the genus *Larus* is effected in one year; but which in the larger species takes three or four years to accomplish.

In the first plumage, the feathers are more or less mottled with brown and white, which in a short time after leaving the nest, are displaced by those which are wholly white underneath; the head becomes white, with an obscure spot behind the ear; but the back, scapulars, and coverts of the wings, continue mottled some time longer. In this state, therefore, it comes nearest to the description of Ray's Brown Tern, which had the whole under side white: the upper brown: the wings partly brown and partly ash-colour: but

then

then he expressly says the head is black; a circumstance which never occurs in this bird, while it has any brown feathers remaining on its back, and therefore cannot be referred to.

The second material change brings it to the Lathamian Brown Gull of the *Second Supplement* to the *General Synopsis*, to which we refer for a comparative description; and which so exactly accords with the following, taken from a recent specimen killed on the 14th of February, on purpose to send to Dr. Latham, that there can be no doubt of their being the same.

Length, thirteen inches and a half; breadth, thirty seven: weight, eight ounces and three quarters. The bill one inch and a quarter in length to the feathers on the forehead; the base red-orange, tip dusky-black: irides dusky: a black spot at the anterior corner of the eye; another behind the ear: crown of the head mottled dusky and white; forehead, and all the under parts white: back, scapulars, greater coverts of the secondary quills, and some of the upper series of the smaller ones near the shoulder grey: several rows of the middle series of the coverts brown, edged with dull white: the two first prime quills are white, margined on both webs with black; in the third the white increases on the outer margin, and the black at the tip; and at the fifth feather the white part becomes pale grey, and the dark part increases on the inner web, and becomes more dusky: secondary quills dusky near their ends, margined with grey: tertials brown: the feathers of the spurious wing are dusky, slightly tipped with white; the ridge of the wing below that, and the three or four larger coverts adjoining, are wholly white; the rest of the greater coverts impending the prime quills, more or less brown: the outer feather of the tail quite white; the next with two dusky-brown spots at the tip; the rest white, tipped with the same for rather more than half an inch, the ends slightly edged with dirty-white: legs and feet dull orange-red.

The

The next change brings it to the Brown-headed Gull.—*Lath. Syn.* vi. p. 383. *Larus erythropus, Gmel. Syst.* ii. p. 597. *Larus ridibundus, Ind. Orn.* ii. p. 812; and in the *Ornithological Dictionary* will be found under Gull-brown-headed, to refer to Gull-black-headed. In this there is no material difference from the last, except that the legs have attained their perfect colour (red), and the head assumes more of the dusky, or brown feathers than usual; while the middle coverts of the wings retain the mottled brown, and the tail the dusky bar at the end. This, though we consider it as an irregular change, may be admitted as an unusual variation in the gradations commonly observed; for scarcely an instance is to be found but where the brown scapulars, and middle series of the wing coverts, are changed for those of grey, and the tail becomes wholly white before the head is much covered with dusky feathers, or the legs become more than reddish.

The fourth change is that which has been generally known by the title of the Red-legged Gull. *Lath. Syn.* vi. p. 381. *Larus cinerarius, Gmel Syst.* ii. p. 597. *Larus ridibundus Ind. Orn.* ii. p. 812, *var. B.*; and in the *Orn. Diction.* is described as Gull-red-legged, with reference to Gull-black-headed. In this change, which brings it so near to maturity, we find a very material difference; for not only the scapulars and coverts of the wings are become grey, but the bar at the end of the tail is lost, and that part assumes a pure white; the legs and bill also become of a fine purplish-red; these last, however, grow darker as the spring advances, and the black increases on the head, a circumstance peculiar to the breeding season, when that colour spreads over the whole head, taking in the throat; and in this, the most perfect or adult state, it is the Black-headed Gull, *Larus ridibundus.* It should however be observed that this most perfect state of plumage disappears in the autumnal moulting, and the bird re-appears

re-appears in that which characterised it as the Red-legged Gull; and these mutations take place every summer and winter; in the former all have the black head; in the latter season none.

Having now traced the Black-headed Gull through its various stages of plumage, after long experience and investigation, we trust that the numerous synonyms will, in future, be concentred to one species, *Larus ridibundus*.

GULL-BLACK-TOED. Larus crepidatus.
Bewick Br. Birds, t. p. 236.

PROVINCIAL.
Dung-Bird. Boatswain.

Mr. Dickinson informs us that *Larus crepidatus* has been shot at Tong, in Shropshire.

From Lord Stanley we learn that a specimen was shot near Liverpool in the year 1808, and is now preserved in his Lordship's museum.

Mr. Neill, Secretary to the Wernerian Natural History Society, of Edinburgh, assures us that several Black-toed Gulls were taken off the Bell rock in the last winter. These he observed did not agree with Pennant's or our description, but exactly with that of Bewick, the description of which we shall here insert, for the sake of making some observations.

"The bill is of a lead-colour dark at the point, from which to the brow it is little more than an inch in length: the nostrils are placed near the nail or tip, in a kind of cere not much unlike that of the Skua Gull. The whole upper and under plumage is dark-brown, each feather slightly edged and tipped with ferruginous: the greater wing-coverts, and the first and secondary quills are dusky, and more distinctly tipped with rusty spots. The tail consists of twelve feathers, the two middle ones longer than the rest; it is of the same colour as the quills, except at the concealed part of its root, which

which is white. The legs are slender, and of a lead-colour; the thighs and part of the joint, and the toes black; the webs are of the same colour, excepting a small space between the first joints of the toes, which is white."

The bird from which Mr. Bewick's figure and description were taken weighed only eight ounces, but was very lean; its length was sixteen inches and a half, and its breadth three feet four inches. This specimen was shot on the coast of Durham on the first of October, 1800.

When it is recollected how much variation there is in the plumage, and even in the colour of the bill and legs of all the tribe of Gulls at different ages, and in different seasons; when we have considered the adverse opinion of other writers concerning the actual species of this genus, and that no less than four have been made out of one, as we have lately noticed of the Black-headed Gull; and that most other species have been divided into two or more, as season or age produced a variation of plumage, it will not be surprising if *Larus crepidatus* and *parasiticus* should prove to be the same species.

We have collated the present subject in other writers, and compared the different descriptions, habitat, and other circumstances, and are led to suspect that this supposed rare species of Gull is in fact no other than a variety of the Arctic Gull. This opinion will perhaps astonish some of our Ornithological readers, but it must be recollected that others as apparently distinct have been traced through all their changes, and at last defined to be the same species. That the bird here described from Bewick, and those mentioned by Mr. Neill, which have been considered as the Black-toed Gull, are in fact no other than the Arctic we have very little doubt. It will be observed that the size of these two supposed species are nearly similar, the bill of similar construction, covered with a *cere*, and the feet of both more or less black. Their habits of pursuing other Gulls to make them disgorge are the same.

same. The superior length of the tail in the Arctic Gull creates no objection to our supposition, for the birds of the first year certainly do not possess this character; and probably the old birds for some months after their annual moulting, have not the two middle feathers much longer than the rest, a circumstance we have noticed in our domesticated Pin-tail Ducks. Upon the whole therefore we really suspect these two birds are one species.

The few Black-toed Gulls that have been shot in England have been after the breeding season. Those from which the original descriptions were taken appear to have had only a part of the foot black, and no mention is made of the thigh and knee being of that colour. In Bewick's bird, not only those parts but the whole foot is black: and in the specimen of Arctic Gull now before us, the black on the foot extends on the leg as high as the back toe; and on the thigh extends rather below the knee. These are incidental circumstances changing with age and season. The inclination to the long feathers in the tail of the black-toed Gull is noticed by all authors; that described in the British Zoology had those feathers an inch longer than the others: those in Bewick's bird, killed in the autumn, had those feathers somewhat longer than the rest. We shall now leave this matter to some of our North British naturalists, whose situation may enable them to trace every change in the *Larus parasiticus*, as effected by age and season, and we trust that our conjectures will be found to be correct.

GULL-BROWN. Vide Gull-black-headed, and Gull-Skua,

GULL-COMMON. Larus canus.
Bewick Br. Birds. ii. t. p. 218.

This, like most others of the Gull genus, has been multiplied into two or three species, especially into what has been termed

termed the Winter Gull *Larus hybernus*, the synonyms of which should therefore be brought together with *Larus canus*.

We have had this species alive for some years, and observed that when it had attained its full mature plumage, in the second year the head and neck is pure white during the summer, but like the Herring Gull those parts become streaked, and spotted with brown in the autumn, which is continued all the winter, and in the spring become again pure white.

This species, in defect of fish or worms, will, when pressed by hunger, pick up grain.

It is almost inconceivable that so small a bird should be able to stow within its body an Eel of a foot in length, but it is a fact we have frequently witnessed. None of the tribe seem to disgorge more readily on being alarmed than this; no effort appears requisite, but a reversion, or contraction of the stomach takes place if in the least frightened, and the compleat meal is regurgitated, and as speedily swallowed again when the fright is over.

GULL-HERRING. Larus fuscus.

Bewick Br. Birds. ii. p. 214.

It is well known that the young of this bird in the first year is mottled all over with brown and white, and no change is made till the autumn of the second year, when the back and scapulars become cinereous-grey; the rest of the plumage continuing as before: the bill remains dusky: the irides get somewhat lighter. At the second moulting the bird begins to change the colour of the bill, the base becoming yellow: the irides paler: the head, neck, and under parts of the body white, streaked with dusky: the wings still mottled brown, with a few grey feathers: the tail mottled, and with the terminal bar as at first. After the third moulting, or at four years old, or little more; that is about the month of December, the same Gull from which these observations were taken, was

not

not matured, the head and neck streaked with dusky, and the tail was marked with a little dusky down the shafts of the middle feathers. This last may be said to be now the only immatured part of the plumage, since the head and neck in adults, always become streaked in the winter; but in the following summer, some of these streaks were retained. In the autumn following, at five years old, the tail was perfected, and the streaks increased on the head and neck as they should do at that season. In the succeeding spring the head and neck became pure white, and nothing remained to be perfected but the point of the bill which was a little dusky.

This Gull is now living and in high health, being thirteen years old. It begins moulting about the middle of August, when it annually assumes the mottled head and neck; and about the middle of February, the partial spring moulting commences, the mottled feathers are discharged, and succeeded by pure white.

This bird has the range of the lawn, but usually takes its station at the kitchen window when hunger presses. When the weather is mild and the ground moist, it is amusing to observe its method of catching worms, by a perpetual trampling upon the same spot, turning about in all directions, and eagerly examining for those that rise out of the ground, which are instantly seized, and the same work is renewed. Similar means are frequently used by fishermen to procure worms for bait; but it could hardly be conceived that the slight pressure or concussion, occasioned by the trampling of so small a body as a Gull, should force the worms from their retreat, but such is the fact. Thus, where man is directed by reason to procure the object of his search, this bird as successfully obtains it by instinct. In the summer it is equally amusing to see this bird catch chaffers, *Scarabæus melolontha* and *solstitialis*, and the common large black Beetle *Scarabæus*

Bæus stercorarius, which fly about in the dusk of the evening throughout the summer months. These are most dexterously caught, if within reach of a flirt with mutilated wings.

At four years old, its piercing and inharmonious cry became incessant in the spring, from which it may be inferred that at that age this species usually begin to breed, and ours being probably a male, its clamour proceeded from the common impulse of nature.

We cannot close this account of a favourite domesticated animal, without remarking the several accidents that have befallen it, which prove its hardy nature. It was first obtained by a shot in the wing, which obliged half the wing to be amputated. A few years since the bone of the thigh was broken by some accident close to the body, and as no art could set the fractured bone in such a situation, it was left to nature and in two or three months it united, and the limb perfectly restored to action. And lately, by some unaccountable means, the wing which was before mutilated, received a compound fracture close to the body, and as it was impossible for nature to form an union of the bone in a limb so situated, and on which the wind had so much power, we determined on amputation, having first applied a ligature just above the part taken off, suffering the ligature to continue; and without any other assistance the poor bird is perfectly recovered.

Before we leave the history of this species, we cannot help remarking that, none but closet naturalists could possibly have jumbled with this, either of the Black-backed Gulls, by supposing either, or both, to be only differing in sex.

It has been our principal object to obtain facts, by attending to these creatures in their native haunts, and strictly investigating their manners and habits, and can therefore speak without doubt as to the identity of them all as perfectly distinct.

distinct. There are fifty Herring Gulls to one of the Lesser Black-backed; and five hundred at least, perhaps a thousand to one of the Larger Black-backed Gulls. But will determined sceptics be convinced, though we assure them that by dissection, we have found both sexes in the three species?

GULL-LESS-BLACK-BACKED. Larus argentatus.

In the late *Leverian Museum* there were two of these birds, one of them retaining a few brown feathers in the smaller coverts, the other perfect. These were erroneously marked as males of the Herring Gull; and this probably led others into the same error.

Mr. Bewick has not given this species a separate place in his *British Birds*, but has figured and described the Great Black-backed species; the leading characters of which, independent of the vast disproportion of size, are properly stated; the black spot in the middle of the orange on the projecting angle of the lower mandible, and the flesh-coloured legs, are invariable specific characters in the matured state of that bird.

In the species of Lesser Black-backed Gull, the bill is ever destitute of the black spot within the yellow; and the legs are immutably yellow, when the plumage has arrived at maturity. Both these species pass through the several changes, and are equally as long arriving at maturity as the Herring Gull.

If what we have offered upon the subject of Gulls be attended to, we flatter ourselves every British species may be clearly identified in every change of plumage, and at all ages, except those of the Herring and Lesser Black-backed Gulls in their first, and perhaps second years dress, at which time they are not to be discriminated from each other.

GULL

GULL-SKUA. Larus catarractes.

Skua or Brown Gull. Bewick Br. Birds, ii. t. p. 233.

PROVINCIAL.

Bonxie.

The only instance we are furnished with, of this species being observed in the south of England, is one that was shot at Sandwich, in Kent, in the winter of 1800, the head and legs of which were sent to us for examination by Mr. Boys.

We are informed by Mr. Fleming that the Skua breeds in Bonas-hill, and Foulah in Zetland, and that there is no distinction of plumage in the sexes. That which was described in the former part of this work, we suspect had not arrived at full maturity, as we have since had a specimen that is plain rusty-brown in the parts where that had the feathers margined with ferruginous, and scarcely any appearance of ash-colour about the head. The remarkable hooked talons, especially that of the inner toe, seems to indicate a habit unusual in the Gull tribe, which generally swallow their prey whole. It is reasonable however to conclude, from the great strength, and semi-circular shape of the inner claw, that this bird frequently holds its prey under its feet, and tears it in pieces.

GULL-TARROCK. Larus tridactylus.

All the synonyma of this bird should be connected with the Kittiwake *Larus Rissa* of Linnæus, being only the immatured young of that species.

GULL-WAGEL.

This appellation has been assigned to several species of the genus, in their mottled infant plumage; and as there is no such bird claiming specific distinction, it should be erased as such, from the pages of Ornithology.

GULL-WINTER. Larus hibernus.

We have before stated, that as this is nothing more than the young of the Common Gull *Larus canus* in an intermediate change of plumage, between that of the nestling and the adult, all the synonyma should be connected with that species.

HARLE. Dr. Barry considers the Harle of the Orknies to be the Goosander. Mr. Fleming says, the Harle-duck of Zetland is the Dundiver. Mr. Neill thinks it is the Red-breasted Merganser, that is so called in Orkney; but it is probable, all have been so denominated by the native islanders.

HAWK-GOS. Falco palumbarius.
Lath. Syn. Sup. ii. p. 37.
Bewick Br. Birds, 1. t. p. 24.

Doctor Latham says, this bird is common in the forests in Germany, where it remains the whole year, preying on various kinds of large and small game, amongst others geese, from whence probably the name of Goose-hawk or Goshawk. Said to be found in abundance in the Azores islands, and by some supposed to have given the name thereto, as *azor*, in the Spanish tongue signifies a Goshawk.

In Thornton's *Highland Tour*, mention is made of a young Goshawk being sent to him from a neighbouring laird to Raites, his sporting seat on the river Spey.

This author further informs us, that he was anxious to make this Hawk managable, as the English breed of this species had never been tried, at least no mention of such was to be found in the history of falconry: but we are not informed whether he succeeded.

In another part of the same work, we are told, that in the

forest formed by *Glenmoor* and *Rothermurcos*, (an asylum for Stags and Roebucks) are some aeries of Goshawks, some of which were seen by the author.

The Colonel (to whom we are under obligations for personal information on the subject) says, the Goshawk flies at the bolt, and the Falcon is excellent for Hares, Rabbits, Herons, and Wild-Ducks; the Tercel for game: and adds, that this species is a short winged Hawk, being in the same proportion to a Sparrow-Hawk (of which kind it is) as a Falcon is to a Merlin. The Goshawk takes its prey near the ground, (for it cannot mount) and has great speed for a short distance. If its game takes refuge, there it waits patiently on a tree, or a stone, until the game, pressed by hunger, is induced to move; and as the Hawk is capable of greater abstinence, it generally succeeds in taking it. "I flew a Goshawk (says the Colonel) at a Pheasant without this park (*Thornville Royal*), it got into cover, and we lost the Hawk: at ten o'clock next morning, the falconer found her, and just as he had lifted her, the Pheasant ran, and rose."

Thus we obtain a most excellent account of the nature and habits of this bird, from a gentleman, whose celebrity in the field of sports stands unrivalled in this, or perhaps in any other country; and who (so long in the practice of falconry) had opportunities of obtaining some parts of the natural history of the Falcon tribe and other birds, which was not to be obtained by other means.

HAWK-SPARROW. Falco Nisus.

New Holland Sparrow-Hawk, Lath. Syn. Sup. ii. p. 51.
Bewick Br. Birds, 1. t. p. 28.
Orn. Danmo. t. 1.

That from New Holland is according to the observations of Doctor Latham, somewhat larger, and darker coloured than ours. We

We have been informed that one of this species in pursuit of a pigeon, which, to save itself, flew in at a window that was open, was followed by the Hawk, who perceiving (it is supposed) the representation of the Pigeon in a mirror on the opposite side of the room, dashed at it, broke the glass, and was killed by the blow.

A very particular friend informed us, he had a brood of young Ducks of a favourite breed upon his bowling-green, and that he lost one daily, until nine out of twelve had been taken, notwithstanding every means had been resorted to for the destruction of the enemy. Cats, Rats, and other four-footed depredators were suspected, and traps were set, and sentinels posted at different times. As this daring robbery was committed in mid-day, and generally about the same time, the gentleman, who was a good shot, took his tour of duty to watch, and at last detected the thief just as he had seized the tenth Duck, and shot him as he was flying over the opposite wall; it proved to be a Sparrow-Hawk.

This species has much of the nature of the Goshawk, and wants only the power of that bird to be equally formidable to the feathered tribe. Like that bird it flies low, skims over hedges and walls, and thus enters a farm-yard or a chicken-court, snatches up a young one, and is again out of sight before the mother of the brood can, by her well-known cry of alarm, call them under her protection. Thus are young broods often diminished, as it were, by magic art, and few suspect the real plunderer.

HEATHER-BLEATER. Vide Snipe-common.

HEATH-THROSTLE. Vide Throstle and Ouzel-ring.

HEDGE-CHICKER. Vide Wheatear.

HEGRIE or SKIP-HEGRIE. Vide Heron-common.

HEN-HARRIER. Falco cyaneus.

Lin. Trans. ix. p. 182.

Bewick Br. Birds, 1. t. p. 34. Ringtail,

Ringtail, Bewick Br. Birds, 1. t. p. 36.

PROVINCIAL.

Katabella.

Having (in a paper laid before the Linnean Society, and which has been published in the ninth vol. of their Transactions) most clearly, and by the most incontrovertible facts, proved, that the Hen-Harrier, *Falco cyaneus*, and Ringtail, *Falco Pygargus*, are actually the same species, we cannot submit our reasons for such an opinion in this place in a more explicit manner, than by transcribing such part of the paper in question, as will most fully elucidate the subject.

About the latter end of June, in the year 1805, my friend Mr. Vaughan informed me, that his servant had found the nest of a Hen-Harrier in some furze, which contained three young, and an addled egg; at this time the infant birds were very small, and only covered with white down: it was therefore determined to take them as soon as we deemed them sufficiently large to be brought up by hand: when that period arrived, the servant was directed to shoot one, and if possible both of the old birds, previously to his bearing away what was considered a prize of no small value.

On the return of the man with the young, he brought with him also the Hen-Harrier, which he assured us he had, under concealment in the furze, shot in the act of dropping a thrush into the nest, while the female (as he seemed to consider the other, and which he described to be a brown Hawk) was covering the young. He afterwards shot at, and wounded the female, but could not obtain her.

Strong as this persons evidence was in our minds, yet it conveyed no more to the public mind than what had been so repeatedly asserted on similar authority; being, however, in possession of the aerie, the means were in our power of fully determining the point in question; and to enable

enable me to observe and note the changes that might take place in the plumage, I undertook the care of the whole brood.

At this time the two largest had thrown out many feathers, sufficient to discover the plumage of the ringtail approaching: the other by its apppearance, must have been hatched much later. In about a month it was evident from size, that their was but one male, so that all my hopes rested on this single life. As they became full feathered, there was at first no distinction in plumage, but the eyes of the supposed male were always lighter than those of the others, whose irides were so dark, as not to be distinguished at a small distance from the pupil. In the dress of the Ringtail, the whole continued through the winter, when the one which had been weakly from the first, died: this circumstance induced me to force a premature change in some of the quill and tail feathers of the others, fearing some accident might frustrate my earnest desire of bringing the matter to a decisive proof, and about the middle of June, I was highly gratified, by discovering an appearance of the new feathers, in the place of those which had been plucked out, that clearly evinced the smaller bird to be a Hen Herrier, and the larger a Ringtail.

Thus I had compelled nature to disclose her secrets before the appointed time; for in every other respect their plumage was yet similar, excepting about the sides of the face, which were paler in colour in the former; in which also the irides were of a dull yellow, somewhat mottled, whereas in the latter they still continued dark.

The shyness of these Hawks had occasioned their breaking most of their larger feathers, although in a place ten feet in length, by five in width; and as their regular moulting season was advancing, they were turned into a garden surrounded by a wall, where, after some time, the female died of the cramp in her legs.

The

The male had about the 20th of July, thrown out many of the new feathers naturally, especially the greater coverts of the wings, and a few grey feathers in different parts of the body. On the 20th of August, the greater part of the quill and tail feathers were grown to their full length, and a gradual increase of grey feathers appeared on most other parts: the eyes also became more orange; but it was not till the middle of October that it had attained that state, which made it desirable to be retained as an existing fact of the change; it was then killed and is now in my museum.

In this state, the plumage of the Ringtail or female still remains about the neck, the smaller coverts of the wings, the thighs, and part of the belly, intermixed with the male plumage: the top of the head and wreath have also a mixture of the feathers of both sexes: the quills, scapulars, and tail, are completely masculine; in the last of these are a few small broken bars of cinereous-brown on a white ground, in the three outer feathers, the exterior margins cinereous-grey; the six middle feathers are almost wholly grey, and the markings are very obscure beneath.

From the account here given of the Hen-Harrier, it is quite clear that the change of plumage is effected in the autumn of the year after it leaves the nest, and not in the same year; and as it is between three and four months in the act of moulting, it is certainly very extraordinary that so few instances have occurred of its being killed in that state which might have been decisive. That such has been taken is evident by the description of *Falco Hudsonius* of authors, which is doubtless this bird in change of plumage.

I have now only to remark that the nest of this bird was composed of sticks rudely put together, was nearly flat, and placed on some fallen branches of furze that supported it just above the ground. The egg is a little inferior in size to that of the Moor Buzzard, and similar in shape and colour."

HERON-COMMON. Ardea major.

Lath. Syn. Sup. ii. p. 303.

Bewick Br. Birds, ii. t. p. 37.

PROVINCIAL.

Hegrie or Skip-hegrie, Heronsewgh.

Notwithstanding the great length of the neck of this bird, it possesses only sixteen vertibral-joints; and a Ring-Ouzel we examined had thirteen.

This species was undoubtedly much more numerous formerly than it is at present: it was in the times of falconry considered as royal game, and a severe penal statute enacted for its preservation. In the present day it is however sufficiently common, as may be observed by the list of Heronries given in the second Supplement to the *General Synopsis* of Birds; to which we could add many more.

It is a matter of astonishment to observe the distance this bird is sometimes seen, in the breeding season, from any known community, for like the Rook they usually congregate for the purpose of nidification.

We have not heard of any other Heronry in the West of England than that at Pixton, the seat of Lord Carnarvon, and one or two others, yet we have seen Herons more than thirty miles from either of these in the height of the breeding season, without being able to discover any nearer place where they resort to breed. From this circumstance, which is equally applicable to many other species, it may be fairly inferred that some, either from youth, age, or defect, are annually sterile.

Doctor Heysham has given a singular account of a battle royal between a colony of Herons, and a neighbouring one of Rooks; the former having been deprived of their antient premises by the destruction of the trees, made an attempt to form a settlement in the Rookery, which was effected after an

an obstinate contest, in which some on both sides lost their lives; but after a second victory of the Herons, in the following year, a truce was agreed upon, and both societies lived in harmony together. A more particular account of this is transcribed into Mr. Bewick's history of British Birds.

HERON-FRECKLED. Ardea lentiginosa.

The species of this genus are numerous, and subject to considerable variation, so that at present many are in great obscurity. The sexes too in some species are greatly dissimilar, which adds to the difficulty of identifying them.

In England there are but two species known to breed, but a few others accidentally wander and swell the catalogue of British Birds, without enabling us to ellucidate much of their natural history. Thus we have the *Ardea Caspica*, *Gardeni*, and *comata*, of which little more is known, than that some species of Heron, supposed to be these, have, from a single instance, had their names recorded, without even a description by which they might be identified in future.

The species now before us, shot in the west of England, does not in the least accord with the descriptions of either of those before mentioned, nor indeed sufficiently with any we can find described, to warrant a reference, or to assign it any synonyms at present, though it is probable it may prove a sexual distinction only of some species obscurely known.

The length is about twenty-three inches. Bill two inches and three-quarters long to the feathers on the forehead, rather slender, and both mandibles equally turned to form the point; the upper part of the superior mandible dusky; sides and lower mandible greenish yellow. The head is very small; the crown is chocolate-brown, shaded to a dull yellow at the nape, where the feathers are much elongated: the chin and throat white, with a row of brown feathers down the middle; at the base of the lower mandible commences a black mark

that

Freckled Heron

that increases on the upper part of the neck on each side, and is two inches or more in length; the cheeks are yellowish, with an obscure dusky line at the corner of the eye; the feathers on the neck are long and broad, with their webs partly unconnected; those in front are pale dull yellow, with broad chesnut streaks formed by each feather having one web of each colour, margined, however, with dull yellow on the chesnut side; some feathers have the dark mark in the middle, especially the lower ones; these are all loose as in the Common Bittern; those at the bottom of the neck four inches long, and hang pendant below the breast: the hind neck is bare, and the feathers that fall over that part are pale yellow-brown: the feathers on the breast are also long, and of a fine chocolate-brown, glossed with purple, and margined with dull yellow: belly and sides the same, but not quite so bright, the brown marks becoming speckled: the vent and under tail-coverts yellowish-white: the back and scapulars are chocolate-brown with paler margins, minutely speckled and glossed with a tinge of purple in some particular lights: the coverts of the wings dull yellow, darkest in the middle of each feather, the margins prettily speckled: the first and second order of quills, their greater coverts, and the *alula spuriæ* dusky lead-colour, with a cinereous dash; the primaries very slightly tipped with brown; the secondaries, and the greater coverts tipped more deeply with the same, and prettily speckled on the light part; the tertials correspond with the lower order of scapulars, which have their margins chesnut, with small dusky lines and spots: the tail is short, and in colour similar to the tertials: the wings when closed do not reach to the end of the tail: the legs are three inches and three-quarters in length from the heel to the knee: the toes long and slender, the middle one, including the claw (which is three-quarters of an inch in length, and pectinated on the inner side) is as long as the leg; the claws are not much

much hooked, but the hind one most so, and by far the longest; their colour dusky brown. The colour of the legs, and bare space above the knee, (which last is about an inch) appears to have been greenish.

The bird from which this description is taken, was shot by Mr. Cunningham, in the parish of Piddletown, in Dorsetshire, in the autumn of 1804. This gentleman relates, that when in pursuit of some Pheasants, amongst the high banks, between the broad ditches of some rich water meadows, about half a mile distant from the river Froome, this bird rose, and he shot it. Mr. Cunningham further remarks, that its flight was rather rapid, and that it made a noise something like the tap on a drum, which induced him to believe it was the common Bittern, and as such sent it to Colonel George, of Penryn in Cornwall, who at that time was making a collection of birds.

At the time Colonel George disposed of his collection, this bird was marked in the catalogue *Ardea minuta*, and was purchased for us as such, and is now in our collection. Thus an extremely rare and unknown bird in England, and apparently a nondescript, has been rescued by accident from oblivion.

Upon a communication with Colonel George on the subject, he was so obliging as to procure us the particulars from his friend Mr. Cunningham, whose account was most satisfactory, and amply detailed; from which the substance has been extracted as far as relates to the natural history of the bird.

The bird was quite fresh when it arrived at Penryn, and was badly prepared by a foreigner, who did not notice the sex; the plumage is however in good preservation.

Our astonishment was very considerable at receiving this bird for the Little Bittern, to which it is no ways allied either in size or colour. It is in its general appearance, more like the Common Bittern, but not much more than half the size, and the plumage altogether much darker, and the markings extremely

extremely different: but we are not surprised that a sportsman should be mistaken in supposing it to be the Common Bittern, if he had not before noticed the very superior size of that species.

We at first thought this bird might be a different sex of the *Ardea Gardeni*, but upon thorough investigation we do not find any information to induce that opinion. Nor is it in the least like the female *Nycticorax* in plumage; the shape of the bill, the toes, and the claws, are quite different. In fact, we are at present unable to refer this bird to any known species, and yet it is probably a female of some one already described perhaps of *Ardea ferruginea*, or *castania*, both of which are European species, but their sexual distinction not clearly ascertained.

Under these circumstances a specific title became necessary; and we trust the figure, which accompanies a full description of the bird, will render it impossible to confound the species, wherever it may hereafter be discovered.

HERON-GARDENIAN. Ardea Gardeni.

We are informed by the Rev. Mr. Dickinson, that the Gardenian Heron noticed in the fifth vol. of *Linnean Transactions*, as having been shot by him, was in fact killed by Lord Kirkwall, as it sat upon a tree, near Thame in Oxfordshire, to which it had retired probably after feeding by the side of the adjacent river Thames. Mr. Dickinson remarks that he first ascertained the species and sent information of it to the Linnean Society. This gentleman further remarks that the description given by Brisson, is by far the most accurate with regard to the specimen in question.

Doctor Latham assures us that he had an account from the late Mr. Pennant, of a Heron that was shot near Cliefden, Bucks, in 1797, that exactly answers to the Gardenian Heron, in

in the *Planches Enluminè*, No. 939. The whole colour of the plumage dusky, the feathers mostly streaked with white.

HERON-GREAT-WHITE. Ardea Alba.

A white Heron made its appearance on the borders of the river Avon, in Devonshire, in the autumn of the year 1805, where it was frequently observed in company with three or four of the common species, and sometimes alone. The Rev. Mr. Vaughan, who had frequent opportunities of observing it, and used every means to procure it, thinks, from its apparently superior size, it must have been *Ardea alba*, and not a *lusus* variety of *Ardea major*; but its extreme wariness disappointed the many attempts to shoot it, although it continued within the range of a few miles for two months.

HERON-LITTLE-WHITE.

Ardea æquinoctialis. Lin. Syst. 1. p. 240.
Gmel. Syst. 11. p. 641. Ind. Orn. ii. p. 696 No. 70.
Ardea candida Bris. v. p. 435. 18.—Id. 8vo. ii. p. 324,
Ardea candida minor Bris. v. p. 438. 20. Id. 8vo. ii. p. 325.
Ardea mexicana candida Bris. v. p. 437. 19. Id. 8vo. 11. p. 324.
Le Crabier blanc á bec. rouge Buf. vii. p. 401.
La Garzette blanche Buf. vii. p. 371.
Ardea alba tertia Raii. Syn. p. 99. 6.—Id. p. 102. 22.—Will. p. 206.—Id. Angl. p. 280.
Little white Heron, Lath. Syn. v. p. 93 and 94. A. B.—Cat. Car. i. t. 77,—Arct. Zool. ii. No. 345.—Lin. Trans. ix. p. 197.

We had the honor of announcing this species for the first time as British, in the Transactions of the Linnean Society, a female having been shot near Kingsbridge, the latter end of October, 1805, and was placed in our collection by a gentleman

Little White Heron

Elgva D. delt. Sculp.

gentleman to whom we are obliged upon many similar occasions, Mr. Nicholas Luscombe of that place.

The length is about twenty inches: the bill two inches long to the feathers on the forehead, and of an orange yellow: the *lore* and orbits the same: irides pale yellow. The whole plumage is snowy-white, except the crown of the head, and the upper part of the neck before, which are buff: legs three inches and a half long, and one inch and a half bare space above the knee; these parts are nearly black with a tinge of green; the toes and claws are of the same colour, the middle claw pectinated.

The skin was of a very dark colour, almost black, so that on the cheeks and sides of the neck, where the feathers are thin, it is partly seen, or at least gives a dingy shade to the white plumage of those parts.

On the back of the head the feathers are a trifle elongated, but scarcely to be called a crest; on the lower part of the neck before, the feathers are more elongated, and though not slender, hang detached over the upper part of the breast: the tail when closed is in a slight degree forked, and so short as to be entirely covered by the wings when folded.

This elegant little species of Heron had been seen for several days in the same field attending some cows, and picking up insects, which were found in its stomach. It was by no means shy, but suffered a bungling marksman to fire twice before he could kill it.

The situation where it was shot is the southernmost promontory of Devon very near the coast, between the Start and the Prawl.

This specimen appears to be allied to that variety found at Bologna in Italy, which is described to have the top of the head and neck nearly of a saffron-colour; the breast the same, but paler; perhaps a sexual distinction. The legs in that variety are said to be saffron-colour; it must

 however,

however, be recollected, that the colour of the fleshy parts, as well as the plumage sometimes depend on age. Other varieties of this species are found in Carolina and Mexico, and other parts of America; and at Jamaica.

HERON-NIGHT. Ardea Nycticorax.
Bewick Br. Birds, ii. t. p. 43.

We are informed by Lord Upper Ossory, that this species was shot on the border of the river Ouze, in the year 1791, a few miles from Ampthill, and that it is now in his Lordship's museum. It is remarkable too, that this bird was killed in the summer. A male specimen in our collection, has the back and scapulars of a fine dark glossy green: the middle claw is serrated.

HERONSEWGH. Vide Heron-common.

HERON-SGUACCO.
Ardea comata Ind. Orn. ii. p. 687 39 y.
Lin. Trans. iii. p. 335 (Lambert).
Sguacco Heron, Lath. Syn. v. p. 74. 39. Var. B.
Id. Sup. ii. p. 302.

Doctor Latham has given a Heron with the above synonyms, which he suspects to be a variety, or sexual difference from the Sguacco Heron; and adds, that one of the usual sort was shot at Boyton, in Wiltshire, by Mr. Lambert, in 1775. It appears to be the
Sguacco Raii. Syn. p. 99. 8.—Will. p. 381. 8.
Le Crabier Jaune. Bris. Orn. v. p. 472. 37.
Le Guacco, Buf. vii. p. 392.

Mention is made in the minutes of vol. iii. of the *Linnean Transactions*, that Mr. Lambert presented a drawing of a bird of this species, April 4th, 1797, which was shot at Boyton, as before mentioned.

The size is nearly that of a Crow: bill livid-red with a brown

brown tip: *lore* greenish: irides yellow: crown of the head much crested, six of the feathers hanging quite down to the back; these are narrow and white, margined with black: the neck and breast pale ferruginous: the feathers on the first very long and loose: back ferruginous, inclining to violet, and furnished with long narrow feathers, which reach beyond the wing when closed, and fall over them: wings, rump, tail, belly, and vent white; the tail pretty long: legs stout, of a greenish yellow: claw of the middle toe serrated within.

This elegant species inhabits the southern deserts and bogs of the Caspian Sea. Is found also in Italy about Bologna, from whence the one here mentioned probably strayed.

HIOGGA. Vide Auk-razor-bill.

HOARSE-GOUK or HORSE-GAUK. Vide Snipe-common.

HOBBY. Falco Subbuteo.

Bewick, Br. Birds, i. t. p. 41.

Shaw, Zool. vii. p. 193. t. 25.

A male Hobby perceiving a Goldfinch in a cage, within a window which happened to be open, dashed at the imprisoned bird, notwithstanding several persons were in the room; but being alarmed at the natural vociferations of some young ladies for the safety of their darling, the intruder mistook the passage by which he entered, and flew against the glass, when his retreat was cut off, and he was secured.

We have frequently witnessed the flight of this species in pursuit of a Sky-lark, which appears to be its favourite game; and it is astonishing to observe how dexterously the little bird avoids the fatal stroke until it becomes fatigued. A Hobby in pursuit of a lark was joined by a Hen-Harrier, who not being so rapid on wing, was usually behind, and ready to avail himself of the sudden turns the unfortunate Lark was compelled to make to avoid the talons of the Hobby; however, after numberless evolutions, the Hen-Harrier

 relinquished,

relinquished, being unequal to the chace, and left the deadly stroke to one better adapted for rapid and durable flight, and aerial evolutions. The country was open, and as far as the eye could discern the chace continued, but doubtless without a chance of the Lark's avoiding the fatal blow.

HOLM-SCREECH, vide Thrush-missel.

HONEY-BUZZARD, Falco apivorus.

Lath. Syn. Sup. ii. p. 35. No. 32.

Bewick Br. Birds, i. t. p. 18.

Shaw. Zool. vii. p. 114.

A few years since, the *Rev. Mr. Holdsworth* (a very intelligent observer of nature), who resides contiguous to a large piece of fresh water called Slapton Ley in South Devon, close to the sea, noticed a large species of Hawk skimming over the water in pursuit of the larger dragon flies *Libellulæ*, which it seized with its talons, and took them from thence with its beak. This bird was observed to frequent the lake daily for a long time, for the purpose of preying on these insects, and Mr. Holdsworth's account of the bird induces us to believe it was the Honey-Buzzard.

This species is said to be found in the open parts of Russia and Siberia, where woods are near, and that it feeds on small lizards and caterpillars, both smooth and hairy, all of which have been taken from its stomach.

Our later observations serve to confirm our former opinion of the very great scarcity of this species in England.

IBIS-BAY. Vide Ibis-glossy.

IBIS-GLOSSY. Tantalus igneus.

Tantalus igneus. Ind. Orn. ii. p. 708.

Falcinellus. Lin. Syst. i. p. 241. Gmel. Syst. i. p. 648.

Ind. Orn. ii. p. 707.

Numenius viridis. Bris. v. p. 326. 4. Id. 8vo. ii. p. 293.

Numenius

Numenius castaneus. Id. v. p. 329. 5.
Le Courlis verd. Buf. viii. p. 29. and p. 31.
Bay Ibis. Arctic Zool. ii. p. 460. Id. Sup. p. 67.
Lath. Syn. v. p. 113. 12. and p. 114. 12. A. Br. Miscel. t. 18.
Tantalus viridis. Gmel. i. p. 648.
Numenius viridis. N. C. Petr. xv. p. 462. t. 19.
Green Ibis. Lath. Syn. v. p. 114. 13. Lin. Trans. ix. p. 198.
Brasilian Curlew. Nat. Miscel. xvii. t. 705.

It is not a little surprising, that the Glossy Ibis should have so long continued multiplied into three distinct species, as it appears to be by no means an uncommon bird in some parts of Europe. The Glossy Ibis has long been admitted into the British *Fauna*, but has been esteemed extremely rare: it is, however, together with its varieties, the Bay and the Green Ibis, more frequently observed with us than formerly, occasioned perhaps only by the greater attention that in these days is paid to the subject of natural history. The more frequent occurrence of these birds, be the cause what it may, has enabled us to form an opinion, without much fear of controversy, that these three hitherto supposed species are in fact no other than varieties, with all the intermediate shades that connect them.

We consider the variety usually called the Bay Ibis *Tantalus Falcinellus* to be the most perfect state of plumage; the Green Ibis *Tantalus viridis* to be the first or young bird; and the Glossy Ibis *Tantalus igneus*, and all its variations, to be the intermediate approaches towards maturity. When the green variety begins to assume the copper or vinacious colour on the wing coverts, it is then no other than the Glossy Ibis; and when further advanced, and the strong cast of bay appears about the head and neck, then it has been termed the Bay Ibis. All these varieties, with the several

shades and intermediate gradations have within these few years been shot in England.

Two in our collection shot in Devonshire are in their first plumage, with very little variation. Another shot within these two or three years near Liverpool, and now in the collection of Lord Stanley, varies but little from what has been called the Glossy Ibis. One in Mr. Cumming's collection shot also in Devonshire, in 1805, nearly at the same time as one of ours, is not very dissimilar to the Green variety. That killed in Anglesea, and figured in the *Naturalist's Miscellany* for the Brasilian Curlew, is very nearly, if not quite in the plumage of the variety called the Glossy Ibis; but the vinaceous copper on the wings is too highly coloured for the bird it is intended to represent, as we are credibly informed. —Vide Curlew Brasilian. In the *British Miscellany* there is a figure of this bird in nearly its ultimate change, or perfect plumage; the state in which it is called Bay Ibis, or at least, a very near approach to it.

The greater proportion of the Green variety has been observed in England, and more of the Glossy, than that of the Bay, and all these (perhaps without an exception) have been shot in the autumn. This is consonant with the opinion, that they are all one species, and that the Green is in the first plumage, as the young must be more numerous than the old immediately after the breeding season; and possibly the Glossy and Bay may be only a sexual distinction of plumage. It is admitted that all the varieties have been noticed in most parts of northern Europe, and in some parts of the south, and are found together. In its perfect state it is known to breed in Russia, and perhaps Siberia; is said to be common about the Caspian and Black Seas, ascending the rivers to breed.

This species like all the long, soft-billed birds, have their vernal and autumnal migrations; hence in the spring they

go

go to the less inhabited parts of the north, where they find security about the rivers and interior lakes to propagate, after which they retire from a country which no longer affords them food, and spread over the southern parts of Europe, and many probably pass the Mediterranean, and enter Africa and Asia. It is remarkable that rarely, if ever, any instance has occurred, of this and some other species of European birds having been observed to visit England in the spring. This, however, must be accounted for by supposing, that birds in their vernal migrations approach their places of summer destination gradually, and not by long flights; consequently, are not likely to have their latitudinal course varied by storms: besides the vernal equinox is not so productive of violent gales of wind, nor, indeed, would such blow them to England when on their passage from the south to the north of Europe, because they pass over land the whole way, and can alight when distressed. On the contrary, those who have spread into Denmark, Sweden, and perhaps Lapland, to breed, frequently remain till actually compelled to leave those more frigid climes, and take long flights in nearly a southern direction; and thus if an autumnal equinoxial gale should overtake them, some are driven from their course, and obliged after passing a part of the north sea, to rest and recruit in England. This will account for these birds being occasionally found in the southern parts of England, and much more rarely in the northern parts, or in Scotland.

Having endeavoured to elucidate the history of this bird as far as possible, it only remains for us to describe some of the varieties, especially the Bay and the Green, (the Glossy Ibis having been given in the former part of this work) and to remark that the synonyms there given may be added to what now accompanies the history of this bird.

It may not, however be improper to remark, that in all the varieties we have seen of this species, the conformation of the bill and legs, and particularly the toes, as well as the shape, length, and weight of the individuals, coinciding as nearly as might be expected, is a further proof of their being the same. And it should also be remarked, that from all the comparisons we have been able to make between the genus Tantalus and that of *Numenius*, there is a strong characteristic distinction in the back toe; that of the former is long, and is a continuation of the heel, or plant of the foot; the latter an appendage to the back of the leg, being seated higher up, is small, and rarely reaches much beyond the heel when it hangs pendent, or at least the base is always at a distance above the heel.

We cannot perhaps describe the variety, called the Bay Ibis, more satisfactorily, than in nearly the words of Doctor Latham.

Bill, nearly four inches long and brown: from the bill to the eye bare, and dusky-green: the head and neck are chesnut, verging to brown on the former, where the feathers have pale edges; the upper parts of the body are glossy-green, appearing bronzed in different lights: the breast, belly, and under parts, are brown, with a gloss of green-gold on the breast: quills and tail darker than the back, and with very little gloss: legs, dusky-blue: between each toe a small membrane at the base. A variety has the plumage mostly of a glossy chesnut, and the breast has a green tinge.

The specimen in the collection of Lord Stanley, before noticed, is rather larger than the green variety, which corresponds with the supposition, that the latter is the young in its first plumage. As his Lordship was so polite to send us the bird in question for examination, a short description may be acceptable to the naturalist. The bill is about five inches

long

long to the gape, and three quarters of an inch deep at the base. The head and upper part of the neck brown, faintly speckled with white; lower neck, breast, and all the under parts of the body rusty-brown, without gloss: back and scapulars glossy-brown, with green and copper lustre, as reflected in different points of view: primary and secondary quills inclining more to green, with a copper tinge: the tertials and tail nearly the same as the back: under scapulars long and refulgent with purple and green: the legs and toes dusky-brown like the bill: the legs measure from the foot to the knee, three inches and three quarters.

By a comparison of this bird with the Green Ibis, there appears to be that little superiority of size, which is natural between the old and the young of the same species; and this is further marked by the superior size of the bill; a circumstance so characteristic of age in similar long billed birds, the Curlew and Godwit. The examination therefore of this specimen serves to confirm our former opinion.

The green variety of this species we shall describe from those we obtained fresh.

Weight, about eighteen ounces: length, twenty-two inches; breadth, two feet nine inches. Bill, nearly four inches and a quarter in length to the gape, moderately curved, and of a bluish lead colour, the sides of the under mandible flesh-colour, the whole fading to a purplish flesh-colour in a few days: from the nostrils, which are linear, a furrow continues to the end of the bill on each side: between the eyes and the bill the bare skin is black: the irides dusky: the head, neck, and all the under parts are dusky, more or less varied with changeable tints of bronze, most so on the breast; the throat and sides of the head minutely speckled with white, with a white feather or two on the upper part of the neck before; and above the eye are several of the same colour, tending obliquely to the hind head, forming an

irregular

irregular line of white spots: the back and wings, including the scapulars and quills are resplendent with changeable purple and green, or more properly dark glossy green, changeable to violet and purple in different points of view, somewhat like the tail of a magpie, but the colours not so strong: the tail consists of twelve feathers, is a trifle forked when closed, and is of the same glossy green as the wings: the legs and toes blue-black; the first are three inches and a half in length to the knee joint, and an inch and a half bare above the knee; the toes are long, the middle one above two inches, independent of the claw; the hind one an inch, and so placed as to bear its whole length on the ground; the claws are dusky, not much bent, the middle one brought to a sharp edge on the inside, and sometimes slightly but irregularly serrated.

Another of these birds in our collection, which proved on dissection to be a female, weighed sixteen ounces: length twenty-one inches. The only difference between this and the one last described is, that this has more white spots about the head, and neck, especially four transverse white bars on the upper part of the neck before.

The first of these birds was shot near Ivybridge by Mr. Rivers, who observed it to alight on the green before his house, and as the sun shone upon it, the resplendent appearance of its plumage attracted his particular attention, and induced him to fetch a gun. The bird was not shy and was readily shot. This was about the middle of September 1805. By accident it got into the hands of our friend Mr. Vaughan, who kindly presented it to us.

The other was shot on a marsh not very distant from Plymouth, and was obligingly sent to us by Sir Wm. Elford, on or about the 12th of October, 1809.

That in the possession of Mr. Lamb, which so well connects the Glossy and Bay varieties, was shot in the month of September, 1793, while skimming over the river Thames in company

company with another, between Henley and Reading.

The Ibis is adopted as a part of the arms of the town of Liverpool, and formerly, if not at present, stood conspicuous upon the Guildhall in truly golden array. This is termed a *Liver*, from which that flourishing town derived its name, and is now standing on the spot where the *Pool* was, on the verge of which the *Liver* was killed.

ICE-BIRD. Vide Auk-little.
IMBER-LESSER.

In Bewick's British Birds we find a species of Diver supposed to be new; but it appears to us only the female of the Common Imber, to which we refer for further particulars.—Vide Diver Imber.

JACK-SAW. Vide Dundiver.
KAE. Vide Jack-daw.
KATABELLA. Vide Henharrier.
KATOGLE. Vide Owl-great-eared.
KELOCKDOE. Vide Grous-black.
KERTLUTOCK. Vide Shoveler-blue-winged.
KESTREL. Falco tinnunculus.

Bewick Br. Birds, i. t. p. p. 38. 40. M. and F.
Lath. Sys. Sup. ii. p. 43. 44. No. 48. and var. C. D.
Shaw. Zool. vii. p. 179.

A female of this species of Hawk, which we had bred up from a nestling, made her escape from our garden to that of a neighbour, scarcely a quarter of a mile distant, where she produced two eggs, and sat upon them.

This bird is in some places called Creshawk, from *Krysat*, in the Cornish language.

KINGFISHER-COMMON. Alcedo Ispida.

Bewick

Bewick Br. Birds, ii. t. p. 19.
Nat. Miscel. t. 129.
Shaw Zool. Lect. i. t. 59.

The Kingfisher will occasionally suspend itself on wing and pounce on its prey; but more frequently springs from a spray.

Is not confined to fresh water, but is found to inhabit the shores of large salt-water rivers and estuaries.

A young bird, full feathered, was kept in a cage for some time, and became extremely docile, but as it would eat nothing but fish, and in consequence was obliged to be frequently fed with what was not fresh, it died in the course of five or six weeks for want of proper food. It would shuffle along the floor to the hand that offered it fish, which it devoured greedily.

KIRMEW. Vide Tern-common.

KITE. Falco Milvus.
Shaw Zool. vii. p. 103.
Lath. Syn. Sup. ii. p. 30.
Bewick Br. Birds, i. t. p. 22.

PROVINCIAL.
Gled or Greedy-Gled.

Shy and guarded as birds of prey usually are, it is curious to observe how totally they are off their guard when intent upon their prey, especially if pressed by hunger. "A remarkable instance of this (says the Rev. Mr. Wheatear, in a letter to the author) at a farm-house in this neighbourhood (Hastings) will serve as proof. A servant girl, the only person in it, (for all the rest of the family were at church) was alarmed by an unusual uproar amongst the poultry; on looking out, she saw a large bird hovering close to the window, over some coops, in which were some broods of ducks and chickens, upon this she sallied forth to drive the bird away, but he took

so little notice of her, that she snatched up a broom, and actually knocked him down and killed him. It proved to be a Kite, which had probably a nest in a neighbouring wood."

A circumstance similar to the above relation, we witnessed in one of this species, that afforded us no small entertainment.

A poor woman was washing some entrails in a stream of water, part of which extended a few yards out of the basket, placed in the water: the hungry bird had long been hovering over, viewing with anxious eye so delicious a bait, and took the opportunity of actually pouncing upon and carrying off a part, in spite of all the woman's efforts with hands and tongue, the latter of which might have alarmed a more powerful enemy.

In addition to these remarkable circumstances in the biography of this noble bird, we remember an instance of two males in the spring of the year, being so intent in combat for the softer sex, that they both fell to the ground, holding firmly by each others talons, and actually suffered themselves to be killed by a woodman who was close by, and who demolished them both with his hook.

It is said the Kite is not uncommon in the temperate and well-inhabited parts of Russia, is more scarce in Siberia, and does not venture further to the north; is not unfrequent about Lake Baikal, but none beyond the Lena.

In England, it is chiefly observed in the more wooded districts, where timber trees abound: is common in the eastern parts, rare in the north, and more rare in the west; for in twelve years residence in Devonshire, we never observed but one in the southern district of that county.

KITTIWAKE. Larus Rissa.

Bewick Br. Birds, ii. t. p. 229.

PROVINCIAL.

Annett, Kishifaik.

This

This Gull in its young state has been usually described as a distinct species, under the title of Tarrock ; but as there no longer exists any doubt of their being the same, the synonyms should be brought together.

It very rarely appears in the southern parts of England, one instance only has occured.

In the month of March, 1806, we observed three of these birds thrown up by the tide, on the south coast of Devon, lying close together, as if they had been shot out of a flock, and had floated on shore together. This circumstance makes it clear, that it sometimes is induced to leave the more northern parts, without being compelled by extreme cold, for that winter had been remarkably mild. These were in complete plumage, and it may not be improper in this place to remark, that the four first quill feathers are tipped with black, but the fourth has a small white spot at the point ; the fifth feather is tipped white, with a black bar near the point, the exterior feather has the whole outer web black, and the same line of black continues to the margin of the outer web of the first greater, and some of the next series of coverts ; and these markings appear to be constant, and at once pronounce the species, being very different from any other of the Gull tribe.

Breeds in the isles of Bass and Glass, on Troup-head, Fowl's-heaugh, near Montrose, and other parts of Scotland. In the isle of May, at the mouth of the Forth, the rocks are covered with the dung of this species, being unmolested, till the young are fit to take, which together with Solen Geese, and some other rock-birds, are eaten by the inhabitants before dinner, as a whet to their appetites.

A story is told, that a gentleman went to the isle of May to eat Kittiwakes, and after eating a dozen, exclaimed that he did not find his appetite improved.

Mr. Boys found these birds at Fowls-heaugh near Stonehaven, in vast abundance, where he says they breed in

greater

greater numbers perhaps than in any part of Scotland: and having shot them of all ages and sexes, he is thoroughly convinced this and the Tarrock form but one species.

KNOT. Tringa Canutus.

In the former part of this work we expressed an opinion that the *Tringa Canutus* or Knot, and the *Tringa cinerea* or Ash-coloured Sandpiper were the same species; in this we are by late observations more confirmed, and think that the synonyms of these birds should be brought together under this title, being in its state of maturity.

The Knot in the late *Leverian Museum* was the same as those in our museum, from which was described our Ash-coloured Sandpiper; the description therefore of that bird must be applied to the Knot, being no other. The young of this bird mentioned also under the article Knot, in the former part of this work, distinguished by the semicircular markings on the upper part of the bird, is undoubtedly the *Tringa cinerea* of Pennant and Latham, and may be found in flocks together with the matured birds in the autumn, upon many of our shores.

Mr. Lewin was certainly deceived, the Knot does not breed with us, and is never taken till the autumn, according to the assertion of the Lincolnshire bird-catchers; indeed none have been taken in nets for many years, nor did they ever appear in the fens, but were formerly caught on or near the sea shore. Mr. Towns, the noted Ruff-feeder at Spalding, assured us he had not seen one for twenty years; but said they never were taken except in the autumn: and further remarked that they fed equally well in confinement as the Ruffs, and on the same food.

In the collection of Mr. Vaughan, is a young Knot, in the plumage that was supposed to constitute it a distinct species, and originally described in the *British Zoology* as the Ash-coloured

coloured Sandpiper. This specimen came amongst a large package of skins from Senegal. It has the semi-lunar black, and white lines on the scapulars and coverts of the wings, like the British specimen, and is in fact exactly similar in every respect.

LANNER.

In another place we have expressed a doubt whether this is any other than a variety of the Peregrine Falcon. Vide Falcon Peregrine.

LARK-FIELD. Alauda minor.

PROVINCIAL.

Tree-Lark.

Mr. Bewick has most certainly confounded this bird with *Alauda campestris* of Linnæus; and what he has denominated the Tree-Lark, at the end of the description of Grasshopper-Lark, is without doubt our Field-Lark.

The *campestris* we believe, has never appeared in England; but both these having been called in English Field or Meadow-Lark, has occasioned confusion, and therefore it would be better to continue Willughby's name to this species; Lesser Field-Lark, the *Alauda minor* of Latham.

Similar confusion has also obscured the Grasshopper-Lark of Mr. Bewick, who under that title has confounded the history of the Pippet-Lark, *Alauda trivialis* of Linnæus with the Grasshopper Warbler, *Sylvia Locustella* of *Index Ornithologicus.*

The deceitful noise made by the *Locustella*, mentioned by Mr. White, and its habits of creeping in thickets bespeaks the Warbler, not the Lark.

In *Harmonia Ruralis* this bird is figured for the Lesser crested-Lark. This confirms our former opinion that there

is

is in fact no distinct species, under the title of *Alauda cristata minor*, as originally described by Ray, but that it is synonymous with Lesser-Field-Lark. Vide the former part of this work, under Lark Lesser-crested.

LARK-SAND. Vide Plover-ringed.

LARK-SKY. Alauda Arvensis.

Lath. Syn. Sup. ii. p. 226.

Bewick Br. Birds, i. t. p. 182.

PROVINCIAL.

Lavrock.

Doctor Latham remarks, that the duty paid at Leipsic for Larks, amounts to 12,000 crowns per annum, at a *Grosch* or two pence halfpenny sterling for every sixty Larks. The quantity may seem prodigious, but the fields appear to be covered with them from Michaelmas to Martinmas.

These birds are seen in Egypt, about Cairo, in like number the beginning of September, and continue for some days; are supposed to come from Barbary, and are called in Egypt *Asfour Dsjebali* or Mountain Birds.

Whether any portion of the northern breed of these birds visit us in winter is not certain, but it is obvious that at particular times they are infinitely more abundant in the southern provinces than at others; possibly they only quit one part of the kingdom and assemble in another, where the climate is more mild. In the winter of 1803, large flocks of these birds were seen in every stubble field in the south of Devon, in number far beyond any thing that has since appeared.

LARK-TREE. Vide Lark-field.

LARK-WOOD. Alauda arborea.

Bewick Br. Birds. t. p. 189.

Orn. Danmo. i. t. 3.

The

The Woodlark will frequently sing in frosty weather, after Christmas, if the weather is bright in mid-day. The Hedge Warbler, Redbreast, Missel, and Throstle, will do the same; all these are early breeders.

This species is more numerous in Devonshire at all times of the year than in any other part of England, particularly in the winter season.

LAVROCK. Vide Lark-sky.
LINNET-GREY. Vide Linnet-brown.
LYRE or LYRIE. Vide Shearwater.
MAGPIE. Corvus Pica.
Lath. Syn. Sup. ii. p. 113.
Bewick Br. Birds, i. t. p. 78.
Shaw Zool. vii.

The Magpie is subject to some defects in plumage, such as white or cream colour: one formerly in the *Leverian Museum* was nearly white, streaked with black.

Is said to be not uncommon in the temperate and southern latitudes of Russia as well as in Siberia, and even at Kamptschatka. Has not been found on the American continent, but according to Clayton's account of Virginia, a Magpie is valued as much as the Red-bird is in England.

MALLEMOCK, Malmock, or Mallduck. Vide Fulmar.
MARTIN. Hirundo Urbica.
By some called Window-Swallow.

In the year 1805, we saw Martins daily, as late as the 15th of November, in the neighbourhood of Kingsbridge, in Devon.

MAVIS. Vide Throstle.
MERGANSER-MINUTE. Mergus Minutus.

The

The number of tail feathers in this bird is the same as the Smew is found to possess.

This being without doubt the female, or young of the Smew in the first plumage, the synonyms should be brought together. Vide Smew.

MERGANSER-RED-BREASTED. Mergus Serrator.

Lath. Syn. Sup. ii. p. 337.

Lin. Trans. iv. p. 121. t. 16. f. i. 2. (trachea).

Bewick Br. Birds, ii. t. p. 261.

Ger. Orn. v. t. 509.—Sepp. Vog. iii. t. 124. 125.

PROVINCIAL.

Harle.

This may be considered a rare species in the south of England. In 1808, we are informed by Mr. Comyns, that he bought a male of a poulterer in Exeter: and in the same year, on the 15th of November, Mr. Holdsworth shot a female on Slapton Ley, which he obligingly sent to us.

As every thing relating to this intricate tribe of birds may serve to elucidate its history, we shall without apology record a full description of this female specimen, proved to be such by dissection.

It weighed twenty two ounces and a half: length, twenty inches; breadth, twenty-nine and a half. Bill two inches long from the forehead, the upper mandible dusky-brown, with the sides orange; the under mandible wholly of the last colour: irides pale orange. The feathers on the top of the head dark ferruginous-brown; the sides of the head, and a little way down the sides of the neck ferruginous, becoming paler underneath, so as to be almost white on the chin and throat, with only a dash of ferruginous: the feathers on the back of the neck are dusky-brown, with a rusty tinge: back and whole upper parts of the body, and smaller

coverts of the wings dusky, dashed with cinereous, the shafts are darkest, and the plumage in general above, upon close inspection, is observed to be finely clouded or undulated with darker and lighter shades: the middle part of the neck before is clouded brown and white: the lower part, and all the body beneath white, except behind the vent, which is mottled: the prime quills dusky-black; the four first secondaries next to them slightly tipped white, and partially so on the inner webs; the six next are white for two thirds of their length, their base black on the outer webs; the greater coverts immediately impending these are also white, with their base black, forming together a white patch on the wing; the eleventh secondary quill is of a sullied white, with the margin of the outer web black: the tertials are dusky, dashed with cinereous, darkest on their outer margin: the tail consists of twenty cinereous-brown feathers, with black shafts, and is rounded at the end: legs and toes dingy-orange; webs dusky-brown.

There did not appear any thing remarkable upon dissection; the *trachea* was plain: the ovaries remarkably small: the gizzard was also very small, but the part between the *œsophagus* and the gizzard was large.

The skin was firmly attached to every part of the body. It was very poor, but did not dissect like a young bird.

There was scarcely any thing in the stomach, but a Bee in the *œsophagus* shews that it was feeding at the time it was shot.

Whether the female, or immatured young of this species, may at any time have been confounded with either of the other Mergansers, we will not pretend to say; but there can be no doubt that the male of this as in the Smew, is at first very similar in plumage to the female.

The *trachea* of the male of this species has an enlargement about the middle, consisting of bony plates of the same texture

as

as the rest of it: at the lower part is a large labyrinthic bony cavity, of an irregular heart shape, with two openings on one side and one on the other, all of which are covered with fine membranes, and from the bottom of this the two *branchi* spring and enter the lungs. But for a figure of this singular apparatus, we refer the curious reader to the *Linnean Transactions* quoted, where an excellent paper on the subject of extraordinary *tracheæ* by Doctor Latham, is highly worth the attention of the practical Ornithologist.

Mr. Pennant says, this species breeds in the isle of Elay, on the shores amongst the loose stones. (Voyage to the Hebrides.)

MITTY. Vide Petrel-Stormy.

MONK. Vide Finch-Bul.

MUGGY. Vide White-Throat-Common.

MURDERING-PIE. Vide Shrike-cinereous.

NIGHTINGALE. Sylvia Luscinia.

Lath. Syn. Sup. ii. p. 233.

Bewick Br. Birds, i. t. p. 206.

We took a nest of young Nightingales early in June, and placed them in a cage, in order to observe what they were fed with by the parent birds; and which appeared to be principally small green Caterpillars.

Mr. Dickinson who resides in Warwickshire, on the borders of Shropshire, is clearly of opinion the Nightingale does not visit that part of the country.

We could not discover this bird in Lincolnshire, although the Greater Pettychaps, and Lesser Whitethroat, were not uncommon; possibly this defect may be occasioned by the want of wood; for near Peterborough, in Northamptonshire, on the borders of Lincolnshire, several were heard; and from thence to Oundle plentiful, where it was wooded and enclosed.

In Whitlebury forest frequent, as well as the other warblers before mentioned.

By experience we learn, that this as well as other birds, accidentally vary from their line of migration, or extend beyond their usual limits. Thus for the first and only time, we heard this charming bird in the south of Devon, near Kingsbridge, pouring forth his matchless song, on the 4th of May, 1806, to our great astonishment; but to our no small mortification, (though expected) he did not remain longer than one day.

We have been told the Nightingale has been noticed about Doncaster, in Yorkshire, the limits hitherto prescribed to its northern range in England. But in the *Tyne Mercury* for the beginning of August, 1808, the following paragraph appeared, and was copied into the *Sun* and other papers.

"It may be worthy of remark, that the Nightingale has "been heard frequently during the present summer in "the garden belonging to the Earl of Londsdale, in Fisher-"Street, Carlisle. We have heard it observed that this "bird was never farther north than Yorkshire, nor more to "the west than Devonshire. Our woods are rendered "melodious by the Thrush, the Linnet, and the Blackbird; "but like the groves of Scotland, we believe they were "never before visited by the sweet and tender strains of this "nocturnal warbler.

Although the Nightingale finds the south of England most congenial, and has perhaps never been observed north of the Tweed, yet on the continent of Europe it is not uncommon much farther north than any part of Scotland. Is said to breed in Sweden, and Germany near Dresden. Is mentioned as being common in the most eastern parts of Egypt; and at the time of migration is plentiful in the islands of the Archipelago. Is also plentiful in lower Egypt in the winter; in different parts of the Delta, amongst the thickest coverts,

several

several were observed; but they did not sing, but only used the common note of alarm so frequently heard in England, especially when any one approaches their nest. They arrive in Egypt in Autumn, and depart in spring.—(Sonnini's Travels into Egypt, ii. p. 51.)

A very curious account of the keeping and feeding Nightingales, by a gentleman of Highgate, related in the *Monthly Magazine*, for 1808, may be perused with advantage, by those who wish to preserve these birds in health.

NUTCRACKER. Corvus Caryocatactes.
Shaw Zool. vii. p. 353. t. 43.
Bewick Br. Birds, i. t. p. 82.

Mr. Anstice assures us he saw one of this rare species near Bridgewater, upon a Scotch fir, in the autumn of 1805. This accurate observer of nature could not be deceived, as he examined the bird, and attended to its actions for some time with the aid of a pocket telescope, which he usually carries with him for similar purposes.

In August, 1808, one of these birds was shot in the north of Devon, now in the collection of Mr. Comyns. Another is stated to have been shot in Cornwall.—(*Monthly Magazine* for December, 1808.

OAR-COCK. Vide Rail-water.
OAT-FOWL. Vide Bunting-snow.
OKE. Vide Auk-black-billed, and Razor-bill.
ORIOLE-GOLDEN. Oriolus Galbula.
Lath. Syn. Sup. ii. p. 126.
Nat. Miscel. viii. t. 285.
Shaw. Zool. vii. p. 408. t. 53.

In the *Monthly Magazine* for December, 1809, mention is made of two having been shot in Cornwall.

The

The nest of the Golden Oriole, figured by Sepp. appears obe composed of pale moss mixed with feathers.

In the first plumage the males resemble the other sex. Are said to inhabit the greater part of the old Continent, migrating from one part to another at different seasons: in their passage through Egypt, which is of short duration, they are there taken for food. Is supposed to be the Mango-bird of India.

OSPREY. Falco Haliætus.
Bewick Br. Birds, t. p. 13.
Shaw Zool. vii. p. 82.

This species of Falcon seems to be more plentiful in Devonshire than any part of the kingdom; for many years past, one or two within our knowledge, have been shot almost every year: three have come under our inspection since the year 1805, and these were all males, weighing from three pounds six ounces, to four pounds. These were nearly similar in plumage, but as they are somewhat different from that described in the former part of this work, which was probably a female, it may be proper to describe a male.

Length, about two feet; breadth, five feet six inches. The sides of the head behind the eyes are white, extending to the hind head, at which part it is mixed with brown: on the chin a few slender dusky streaks: across the upper breast a very broad band of brown, the feathers margined paler; all the other parts beneath white, like the former. The upper parts also like the former: the quills dusky, some that had not been moulted are brown: the tail dusky-brown, the pale bars not very conspicuous on the upper side: the legs and toes are remarkably roughened with scales, and on the inner side of the extremity of the outer toe are two or three spines. This was shot in July.

Another

Another shot in November has the plumage much brighter; the upper parts darker, being dusky-brown, and all the feathers on those parts, even the quills, are slightly tipped with yellowish-white: the dark streak, or patch behind the eye, is destitute of white tips to the feathers: the under parts like the last.

The third, shot in October, is like that killed in November.

In the Falcon tribe, it is usual for the feathers on the thighs to be long, and hang down below the knees; but in this, the feathers on those parts are remarkably short, and consequently better adapted for submersion, or pouncing on its scaly prey. The roughened feet, and the unusual disposition of the talons, which are formidable, greatly contribute towards securing it. Short downy feathers continue half way down the front of the legs, but not behind.

An Osprey was seen to stoop and carry off a young Wild-Duck half grown, from the surface of the water at Slapton Ley; the Duck by struggling fell from the talons of the Eagle, but was again recovered before it reached the water.

Near the above lake, a specimen that was shot in October, 1809, was found to be plentifully gorged with Perch.

As we were crossing the bridge over the river Avon, at Aveton Gifford, on the 9th of April, 1811, we observed an Osprey hawking for fish; at last its attention was arrested, and like the Kestrel in search of Mice, it became stationary, as if examining what had attracted its attention. After a pause of some time, it descended to within about fifty yards of the surface of the water, and there continued hovering for another short interval, and then precipitated itself into the water with such great celerity, as to be nearly immersed. In three or four seconds the bird rose without any apparent difficulty, and carried off a trout of moderate size, and instead of alighting to regale upon its prey, it soared to a prodigious height, and did not descend within our view. This bird

flies

flies heavily, not much unlike the common Buzzard; but not unfrequently glides slowly with motionless wing. When examining the water for prey, its wings are in continual motion, although it remains stationary for a considerable time; its superior weight, perhaps, renders it difficult to continue suspension in the air, with an almost imperceptible motion of the wings, like the Kestrel.

Possibly the Osprey was formerly trained for hawking of fish, as we find by an act passed in the reign of William and Mary, persons were prohibited at a certain period of the year, from taking any Salmon, Salmon-peal, or Salmon-kind, by Hawks, racks, gins, &c.

OUZEL-BLACK. Vide Blackbird.

OUZEL-PENRITH.

Lath. Syn. Sup. ii. p. 177.

Dr. Latham has described a bird in his second Supplement to the *General Synopsis*, under the above title. It is said to be superior in size to the common Water Ouzel; the head and whole upper parts dusky: chin and throat white; at the bottom of the last a bar of dusky; breast, belly, and thighs white, with short black streaks pointing downwards, more numerous towards the lower belly and thighs: vent rusty-yellow, crossed with bars of black: legs rusty-yellow.

The Doctor observes, that he took the account out of the late Mr. Pennant's notes of a journey from Downing to Ashton Moor, in which is painted a figure of the bird. Mr. Pennant thought it to be a new species; and is said to be found about Penrith: was given to Mr. Pennant by Miss Calvin.

A single instance of a bird being found in England of so considerable a size, not noticed in any other part of the world, must be received as a distinct species with great caution; indeed

indeed we have scarcely a doubt but the bird in question, is actually a *lusus* variety of the Water Ouzel.

OUZEL-RING. Turdus torquatus.
Bewick Br. Birds, i. t. p. 96.

By Mr. Ray's account, this bird has been called the Heath Throstle, in Craven.

A specimen, shot in the neighbourhood of Kingsbridge, on the 25th of March, may be supposed to be in full plumage. It weighed full four ounces, and was eleven inches in length. The bill was partly orange-yellow, especially the under mandible all but the tip; the point and the base of the upper mandible more dusky: irides dark hazel: the whole upper part of the bird is black, with scarcely any grey on the margins of the feathers: tail also black: the quills, and wing-coverts dusky, more or less bordered with pale grey, most so on the secondaries, and their larger coverts: the under parts black, with cinereous edges to the feathers on the body, and under tail-coverts: gorget pure white: under wing-coverts pale brown, with broad grey margins: legs dusky-brown.

It is probable the young birds do not attain the pure white on the breast till the following spring, and at that time the bill becomes partly yellow; perhaps completely so in old birds, as in the Blackbird. Those that are destitute of the mark on the breast, are probably in their nestling feathers, which usually change in part before they leave us in the autumn, unless a very late brood: indeed as late as the 26th of September we have seen a specimen with scarcely any appearance of the gorget, the feathers on the breast were only a trifle paler, than the rest of the body.

Portland island in Dorsetshire, seems to be one of the points, from which these birds take their departure, when they go to the Continent to winter; and also a landing place on their return in the spring. Our late friend Mr. Bryer, of Weymouth, assured

assured us, that in the autumn of the year 1802, these birds were more numerous than usual in their autumnal visit to Portland.

OUZEL-ROSE-COLOURED. Turdus roseus.
Nat. Miscel. t. 231.
Bewick Br. Birds, i. p. 85.

In the *Naturalists Miscellany*, mention is made of one of this species having been killed in Oxfordshire, in the year 1794.

OUZEL-WATER, Turdus cinclus.
Bewick Br. Birds, ii. t. p. 16.

PROVINCIAL.
Dipper. Water-Colly.

This bird is amongst the few that sing so early in the year as the months of January and February. In a hard frost, on the 11th of the latter month, when the thermometer in the morning had been at 26°, we heard this bird sing incessantly in a strong and elegant manner, and with much variation in notes, many of which were peculiar to itself, intermixed with a little of the piping of the Woodlark. At the time it was singing the day was bright, but freezing in the shade; the sun had considerably passed the meridian, and was obscured from the bird by the lofty surrounding hills.

The Water Ouzel devours a considerable quantity of fishes spawn, especially the large ova of salmon.

According to Acerbi, is not found in Italy, but in his travels through Sweden, noticed it near Yervenkyle, in Finland, where he observed that during winter it flies near the cataract.

We have seen the Water Ouzel walk into the water, and as it were sink beneath the surface, as if its specific gravity was actually

actually greater than that element; but doubtless some exertion must be used to keep itself at the bottom, besides that of simple walking, or it would instantly rise and float on the surface; for, as well as all other birds, its specific gravity is greatly inferior to that of water. In one or two instances where we have been able to perceive it under water, it appeared to tumble about in a very extraordinary manner with its head downward as if pecking something; and at the same time great exertion was used both by the wings and legs. The idea of any bird being capable of walking beneath a fluid so infinitely more dense than itself, does not require any depth of philosophical reasoning to refute. Birds, of all animals have the least specific gravity, and consequently require great exertion to keep themselves under water. The Water-Ouzel has been seen to float on the surface of the water, and from thence dive.

OWL-GREAT-EARED. Strix Bubo.

Lath. Syn. Sup. ii. p. 55.
Bewick Br. Birds, i. p. 47.
Shaw Zool. vii. p. 211. t. 28.
Neill Tour in Orkney, p. 195.—Hist. of Orkney, p. 312.

PROVINCIAL.
Stock-Owl.

This species seems to be pretty universally spread over both the old and new Continent. Levaillant met with it, as also the Long-eared Owl, on the borders of the Elephant's river in Africa.

It should seem this bird is well known in the Orkney islands, for says Mr. Neill, "In addition to Dr Barry's account of this bird, it may be added, that it often attacks Rabits and and Red-Grous, which are abundant in several of the islands." By the natives is called Stock-Owl or Katogle, which is from the Norwegian, name Kat-ugle.

OWL-LITTLE. Strix passerina.
Bewick Br. Birds, i. p. 57.
Passerine Owl. Shaw Zool. vii. p. 264.

We are assured by Mr. Comyns, that a neighbour shot at one of this species in the north of Devon, in the autumn of 1808.

OWL-SHORT-EARED Strix brachyotos.
Lath. Syn. Sup. ii. p. 56.
Bewick Br. Birds, i. t. p. 50. and p. 52.
Shaw Zool. vii. p. 223.
Strix ulula, mas. and fem. Sepp. Vog. i. t. p. 63.
Strix Arctica, Mus. Carls. fasc. iii. t. 51.

Doctor Latham imagines that this bird is the Hawk Owl of Edwards.

Mr. Pennant, in his supplement to the *Arctic Zoology*, considers the *Moyen Duc ou Hibou* of the *Planches Enluminè* as well as *La Chouette of Buffon* to be this species. It must be admitted that the synonyms of this species are in great obscurity, occasioned by its very different appearance about the head. While living, it is capable of erecting a series of feathers on each side the head, but which in dead specimens are scarcely obvious. These erectable feathers that form the auricles when alive, are scarcely longer than the rest, and are always depressed in a dead bird. Sometimes indeed, one feather is somewhat longer than the rest, but doubtless it has most commonly been taken for a smooth headed bird, and described as such for a different species.

It is a northern species, is not confined to Europe, but is said to be common on the American Continent; and two specimens (we are informed by Doctor Latham) were brought over by Captain Dixon, from the Sandwich islands.

Mr. Bewick mentions a circumstance which implies that this species is occasionally gregarious; twenty-eight having been found in a turnip field in November; but perhaps the following

following statement from an attentive observer of nature, may serve to elucidate the cause of this assembly.

Mr. Anstice assures us that a few years since, mice were in such vast abundance as to destroy a large portion of vegetation in the neighbourhood of Bridgewater; and in the autumn a great many of the short-eared Owls resorted to that part in order to prey on them. They were found in the fields amongst the high grass.

We never observed it so far west as Devonshire till the latter end of the year 1809, when about the middle of November our friends supplied us with two specimens. In the stomach of one were the fragments of a Sky-Lark, and a Yellow-Hammer.

There is nothing remarkable in the *trachea* of this bird, but in being considerably compressed.

OWL-TAWNY. Strix stridula.
Bewick Br. Birds, i. t. p. 55.
Wood Owl. Shaw. Zool. vii. p. 253.

We are glad to find Doctor Latham is of our opinion, that the Brown Owl does not constitute a distinct species from this. We have always been clearly of opinion that they are the same, and had brought all their synonyms together in the former part of this work.

What seems to have puzzled our scientific friend in the former part of his works was the drawing of an Owl, sent to him by Mr. Pennant, which had yellow irides, and was called Tawny-Owl. No such bird, however, exists in England, and we must therefore conceive the figure had been taken from a preserved specimen in some collection, and might really have been the true Tawny-Owl of this country, but unfortunately it is too frequently the case, that persons employed to stuff birds, put in any eyes that may be handy, or perhaps that they think most attractive, without regard to science;

science; such we have frequently met with, and such no doubt deceived Mr. Pennant in the bird, the drawing of which he sent to Doctor Latham.

We are credibly informed, that it is no uncommon occurrence for the Tawny Owl to make its nest in an ivy-bush, or on the stump of an old pollard tree in Devonshire. This we believe is not the natural inclination, but the necessity of the bird, for in the part of Devonshire alluded to, there is scarcely a tree large enough, in the hollow of which an Owl could conceal itself.

OWL-STOCK. Vide Owl-great-eared.

OWL-WHITE. Strix Flammea.

Lath. Syn. Sup. ii. p. 69.

Bewick Br. Birds, i. t. p. 53.

Barn. Owl. Shaw Zool. vii. p. 258. t. 33.

This species is said to be common at the Cape of Good Hope, where it builds a nest amongst the rocks, composed of a few twigs and dried leaves, and lays seven or eight eggs. Is called by the natives *Doodvogel*, (bird of death) and the other kinds of Owls *Uylers*, the usual name for all night birds.

OYSTER-CATCHER. Hæmatopus ostralegus.

Bewick, Br. Birds, ii. t. p. 7.

PROVINCIAL.

Tirma, Sea-piot or piet, Trillechan, Chalder, Chaldrick, Skeldrake or Skelderdrake, Scolder.

This species appears to be more abundant on some parts of the sandy flat coast of Lincolnshire than on any other part we recollect to have noticed; and we were surprised to observe a very large flock of these birds assembled together in the midst of the breeding season. Upon enquiry we found that at the time of incubation a remarkable high tide had swept away all their

their eggs, together with those of the Ring-Plover and Lesser Tern, which usually lay their eggs a little above high water mark.

On that coast near Skegness, at a point called Gibraltar there is an isolated part of a marsh, where Oyster-catchers breed in such abundance, that a fisherman informed us he had taken a bushel of eggs in a morning.

Instinct has directed these, and other shore birds, to deposit their eggs above the flux of the highest spring tides, and therefore it must have been a very unusual high tide to have caused such devastation amongst the eggs.

The number of eggs layed by this bird is invariably four, deposited in a small excavation without any nest, and like others of a similar nature, the bird always disposes them so as to occupy the least possible space, that they may be equally exposed to the incubating temperature of her body; that is with the smaller ends inwards.

The weight of the egg is about an ounce and a half.

It is said that the Oyster-catcher has no aversion to take the water; probably like the Curlew, it is not distressed on the water, and can occasionally make its escape by swimming if wounded; a circumstance not unusual with the common Sandpiper.

PARTRIDGE-COMMON. Perdix cinerea.

Lath. Syn. Sup. ii. p. 279.

Rural Sports, ii. t. p. 401. and t. p. 406.

Bewick Br. Birds, i. t. p. 317.

In the *Rural Sports* we are informed, that out of a covey of eight birds, four were of a clear white, and three pied; taken near Market Weighton at Mr. Barnards.

The same author mentions the singular circumstance of a Partridge making her nest, or more properly depositing her

eggs on the top of a pollard-oak, close to a foot-path, into which the bars of a stile were fastened: in this situation sixteen eggs were hatched, and the young escaped.

It does not appear that there is any instance on record, of the Common Partridge breeding in confinement, for those mentioned in the *Tableau Elementaire* as having been bred in confinement by a Carthusian Monk, were undoubtedly of the Red-legged species *Perdix rufa*, not *cinerea*.

We have known seven or eight that were troublesomely tame, and that lived together for several years, yet never produced eggs.

We bred up some young Partridges under a common domestic Hen, which became so tame as to feed from the hand. In their infant state they were chiefly fed with alum-curd and groats or grits, and occasionally with Emmets and their eggs; and it was remarkable, that although they devoured with avidity one or two species of the black sort, they would not touch the red or tawny Emmets. Hard corn was given to them sparingly, as it was found to lie in their crop too long, and actually killed one of the brood. Barley and other similar grain should therefore be soaked for twenty-four hours at least, previously to its being given them. In cases of such indigestion, several whole pepper-corns is a good stimulant, with which they must be crammed; and soft food only should be given, especially such greens as they will eat, amongst which chick-weed seems to be a favourite aliment: bread is also a good change of diet, but Grasshoppers are the best physic, and will tempt them to come to hand at all times. These insects appear to afford a most grateful nourishment to numerous species of birds; Turkeys and other domestic fowls eat them with avidity, and Pheasants and Partridges in their wild state devour vast abundance.

As these young Partridges required fresh greens, they were, at six weeks old, allowed to range in a walled garden, their

their foster-mother only being confined under a coop; and as a change of food, hemp and canary seeds were given to them occasionally, which were preferred to other seed or grain. By this treatment Partridges may be raised with ease.

Upon the approach of the ensuing spring, the male (for there was only one out of four) shewed evident signs of love, by spreading his tail and courting his favourite female; for to one only was he attached, and occasionally drove away the other two. He was never a moment separate from his favourite lady, and if he found an insect or delicate morsel, he uttered a call, something like the clucking of a common Hen to her chicken, picked it up, and then let it fall from his bill to entice her, and repeated it till she accepted his offer.

To one of the females he was so extremely savage, that she was obliged to be removed; to the other he was only civil.

The female taken from the menagerie, was turned into a walled garden, where to our astonishment, she soon attracted a wild mate, as late as the month of May, and hopes were entertained that a brood between them might have ensued; these hopes, however, were of short duration, as a cat killed the female.

The attached pair in the menagerie did not breed, and towards autumn the female fell a sacrifice to the same feline enemy. The remaining female, together with the male, were confined in a smaller place during the winter, and were both attacked with the vermicular distemper, which killed the female, and the male was with difficulty recovered. Of this dreadful disorder, that commits such devastation amongst our domestic fowls, we shall have occasion to speak more fully under the article Pheasant. These two Partridges had been confined with some Ruffs and Land Rails, and none of those were ever affected with the distemper. The Partridge that died by suffocation was opened, and the *trachea* found

stuffed with vermes: the other was turned out where it could collect more, and a greater variety of vegetables, and had no water but what was strongly impregnated with rue and garlic, and though excessively bad, recovered in three weeks; even in the first week some of the violence had abated.

Mr. Vaughan informs us, that he had a brood of thirteen young Partridges in the latter end of July, 1808, that were hatched under a domestic hen, and in less than a month all died, but one, of the distemper called the gapes.

PARTRIDGE-GUERNSEY. Perdix rufa.

Rural Sports, ii. t. p. 408.

Notwithstanding many gentlemen have turned out the Red-legged Partridge upon their estates, with a view to propagate the species at large, few have succeeded. Mr. Daniel, however, assures us, that they are now plentiful near Orford, in Suffolk, by the Marquis of Hertford having imported many thousand eggs which were hatched under hens and liberated. This gentleman further says, that he found a covey of these birds, in 1777, near Colchester, consisting of fourteen, several of which he shot.

From another respectable quarter we have been informed, that many covies of Red-legged Partridges may be found in one day in the neighbourhood of Ipswich, on manors that are preserved; and that they do not frequent the corn-fields, so much as the waste heathy ground.

In the year 1809, one of the species was shot in the autumn by a gentleman of Newbury, in Berkshire, out of a covey of Common Partridges.

It is a curious fact, that the Red-legged species should be so much changed in its nature, by only passing the British channel from Picardy, in France, to Kent, in England,

not

not above the third of a degree difference in point of latitude; yet prolific as it is on the south side of the channel, it becomes less inclined to propagation, even in the same sort of soil on the north side, so that every exertion to generally naturalize it, has hitherto proved abortive.

In Spain and Portugal this species is very abundant, frequenting the vineyards especially in the winter.

PEESEWEEP. Vide Lapwing.

PELICAN.

In the British Museum is a Memoir, in M. S. of T. Brown, of Norwich, giving an account of the Great White Pelican having been shot in England, May 1663, at Horsey Fen; and measured three yards from tip to tip of the wings. A query is here put, whether it might not be one of the King's Pelicans, kept at St. James's which had been lost about the same time.

Doctor Latham also says that Doctor Leith assured him, that a few years since, in the month of May, he saw a Pelican fly over his head, on Blackheath, in Kent, and that it was of a brownish colour; and which the former conjectures might be his brown species.

The first of these in the relation has been accounted for, as a bird escaped from the King's Mews. The last, with all deference to Doctor Leith, who only saw the supposed Pelican at a distance flying over him, we are induced to believe was an immatured Swan in its brown plumage, which at a moderate distance might have deceived him. We do not believe the *Pelecanus fuscus* has been observed out of America, it appears to be truly a transatlantic species.

PETREL-STORMY. Procellaria pelagica.
Bewick Br. Birds, ii. t. p. 249.

PROVINCIAL.

Mitly, Assilag, Spency, Sea-Swallow, Allamotti.

There appears to be some difference in the plumage of this species, for two now before us weighed about an ounce each: the coverts of the secondary quills are tipped with white, not the quills themselves; and a little white is observable on the under part of the wing: the vent in these is not white, but the rump and over the thighs are of that colour: the feathers of the upper tail-coverts are white at the base, with black tips: the tail is composed of twelve very broad feathers, and when closed is nearly even at the end, their colour dusky-black, with more or less white at the base of all except the two middle ones.

We find this species breeds on the rocky coast of the north of Cornwall, from whence a gentleman in our neighbourhood, who is a collector of birds, received specimens taken off their eggs, in the month of June.

Like other rock birds, the Stormy Petrel makes no nest, but deposits one large egg, about the size of that of the Blackbird, but more regularly oval, of a white colour, with an obscure zone of purplish-brown, formed by minute specks at the larger end.

Mr. Fleming assures us, that the Stormy Petrel breeds in all the islets of Zetland, but is never seen on land in the winter. Thus it has been found to be truly indigenous to the British dominions, extending from the southern to the most northern extremity. It is, however, local, and by no means generally diffused, but is attached to particular spots for the purpose of nidification.

It is no uncommon occurrence to find birds of this species dead in places contiguous to the coast, and sometimes remote; such we have had brought to us several times in the months of October and November. A specimen was killed near Bath;

Bath; and one is said to have been shot so far inland as Derbyshire. From these circumstances it is understood, that they sometimes fly across the land; but what occasions the annual mortality which has been noticed in different parts is difficult to determine: perhaps illness is the occasion of their flying to the shore, to make a shorter cut across promontories, or, in a weak state, to avoid a storm or an opposing wind, and being unable to proceed far, are found dead on land.

We believe the assertion, that this bird is expert in diving, to be without foundation; the form and levity, too, (from having a large proportion of feather, like the Gulls,) should alike render them incapable of immersion. They have not the form for pursuing their prey under water, nor do they appear to possess the means of diving: it is from the surface of the sea that they collect their sustenance.

Stormy Petrels fly in small flocks, and are the only species of the feathered creation that dare venture so far from shore as the middle of the Atlantic Ocean, where they appear to find subsistence, and only retire during the breeding season. In a voyage to America we noticed two or three small congregations, and these generally followed the ship for several hours, flying round, and playing about in the manner of Swallows, frequently stooping to pick up bits of biscuit thrown over for the purpose. Fortunately, however, we looked in vain each time for the accompanying tempest which these bewitched chicken of *Mother Cary* were supposed to forbode. Sailors, naturally superstitious, have always considered this little bird the forerunner of stormy and tempestuous weather, as the appearance of the Kingfisher denoted fine weather, denominated the halcyon days by the ancients. These auguries, however, may be founded in fact, for as the Kingfisher is only seen on the sea shores, or on the coasts of bays and estuaries in the temperate months; so the Petrel, whose rapid wing outstrips the wind, flies from the storm

storm, and in its passage over the vast Atlantic, may truly warn the mariner of the approaching tempest. Thus all that is related is not fiction; thousands have witnessed the tempest that has succeeded the appearance of these little harbingers of Æolus; the fact is only known to the mariner, he does not reason upon the occurrence, and unable to account for their sudden appearance, calls in the aid of superstition.

PETTYCHAPS-GREATER. Sylvia hortensis.

Lath. Syn. Sup. ii. p. 234.

Fauvette. Pettychaps. Bewick, Br. Birds, 1. p. 218.

Die Bastardnachtigale. Naturf. 27. s. 39. 1. (Beckstein)

M. Beckstein observes that this bird, which he calls Bastardnachtigale, is found throughout Sweden and Germany, departing thence the latter end of August.

Till recently we had not traced this species so far west as Devonshire; but in 1806 we heard several in the month of June, in the thickets that border the river Avon, within a few miles of its junction with the sea, singing most charmingly; their notes being so mellow, and so singularly elegant, that no one conversant in the song of birds can possibly be mistaken. We afterwards saw two or three pairs of them.

In a tour across the kingdom from the western to the eastern coast, this bird frequently occurred between the eastern parts of Somersetshire and Lincolnshire, and no where more abundant than between Spalding and Boston in the last-mentioned county; and indeed every where that shelter could be found, even in the few hedges about the village of Wainfleet, and in the thickets surrounding the decoys on the fens in that neighbourhood.

It is necessary to notice the mistake that Mr. Bewick has fallen into with respect to this and some others of similar habits, which he has termed (after Buffon) *Fauvettes*. The birds

birds in question are his Pettychaps, Passerine Warbler, Yellow Willow-Wren, and Least Willow-Wren. The first of these, by the description, and more particularly by its manners and habits, is the Greater Pettychaps, but unfortunately he has affixed to it the synonyms of the Lesser Pettychaps, *Motacilla hippolais* of Linnœus. The second is without doubt the Reed Wren, *Sylvia arundinacea*, of this work, not the Passerine Warbler, which, though a continental species, has not, we believe, been found in this island. The third is our Wood Wren, and the fourth is the *Motacilla hippolais* of Linnœus; the Lesser Pettychaps of this work.

This remark is obviously necessary to prevent these birds from being confounded; and as we shall have occasion to speak again of these warblers in their turn, we shall conclude our history of this species by a few remarks on a note of Mr. Bewick's, at the bottom of page 219. "We have" (says this author) "adopted the name of *Fauvette*, for want of a more "appropriate term in our language. We apprehend this to be "the Flycatcher of Mr. Pennant, *Br. Zool. vol.* 2. *p.* "264, *1st edit.* and the Lesser Pettychaps of Latham, which "he says is known in Yorkshire by the name of the Beam-"bird; but he does not speak from his own knowledge of the "bird. It certainly is but little known, and has no common "name in this country."

That the unfortunate Beam-bird of Willughby has caused much perplexity must be admitted, though it is, undoubtedly, the spotted Flycatcher: yet in the latter works of Pennant, he suspected it might be the *Motacilla hippolais*, the Lesser Pettychaps of Latham, not this bird.

The Greater Pettychaps has been long known, was first discovered in Lancashire, and we may now conclude from what Mr. Bewick relates, that it is met with about Newcastle, which at present is its utmost northern range, noticed in England. We were not personally able to ascertain it in Northumberland,

Northumberland, although we were in that county for several summer months.

PETTYCHAPS-LESSER. Sylvia Hippolais.
Lath. Syn. Sup. ii. p. 236.
Least Willow Wren. Bewick Br. Birds, i. p. 232.
Motacilla Fitis. Naturf. 27. S. 50. 5.

PROVINCIAL.

Chip-chop, Chiff-chaff, Choice and Cheap.

This is the *Motacilla hippolais* of Linnœus the *Sylvia hippolais* of Doctor Latham.

The provincial names here specified are all expressive of the double note which it reiterates throughout the summer months, and even till late in the autumn.

It is of all the migrative warblers the earliest in its vernal visit; and is perhaps the only one that has occasionally been observed with us during the winter; and that probably confined to a small district in the mildest part of England. From its very early cry in our neighbourhood in the south of Devon, we had long suspected this hardy little species might not wholly quit these parts, and we were confirmed in this opinion in the winter of 1806, one having been seen in the garden about Christmas; and in the latter end of January following, we had ocular proof of the fact, by observing two of these little creatures busied in catching small winged insects, which a bright day had roused in great abundance about some fir-trees. These they collected by frequently springing from the ends of the branches, and while thus employed we shot one of them.

This was a remarkable mild winter, the thermometer had never but once been below the freezing point, and that only about half a degree.

In the year 1808, on the 16th of December, we observed two

two more of these birds in the same fir-trees; there had been a frost the preceding night, but the sun had roused a small species of *Culex*, which the Pettychaps were feeding on. The weight of one of these, which we also killed, was one dram thirty-three grains. The other was frequently seen afterwards as late as the middle of January.

It may now be easy to account for the very early cry of this bird occasionally in the spring; for probably such had remained with us all the year, but are wholly silent in the winter: the earliest we ever heard in Devonshire, was on the fourteenth of March, 1804, at which time vegetation was unusually forward.

The Lesser Pettychaps, and the Long-tail Titmouse are the smallest birds in England, and perhaps in Europe, the Golden-crested Wren excepted: their weight is nearly similar. The specimen of the Pettychaps, weighed in winter, was unusually small, though not in bad condition.

The note of this bird is truly simple, but pleasing from the concomitant, being the first harbinger of spring. During the breeding season their binotonous cry is incessant, and has caused a variety of similies. Some liken it to a repetition of *chiff chaff*, others to *twit twit:* and M. Beckstein thinks it expresses the word *fit*, repeated. Doctor Cornish informs us, that about Totnes it is known by the name of *Choice* and *Cheap*, from their notes; but of all the similies, the words *chip chop chop*, *chip chop*, seem best to represent the notes.

PHALAROPE-RED. Phalaropus hyperborea.
Red-necked Phalarope. Br. Miscel. i. t. 10. fem.
Phalaropus Williamsii. Lin. Trans. viii. p. 264.

A specimen of the Red Phalarope, in our collection, has the throat white; the upper part of the neck before, and on the sides, bright ferruginous; the lower part of the neck

banded

banded with cinereous: the upper part of the back, and scapulars, a mixture of ferruginous, and deep ash-colour: the secondary quills are, in part, very slightly tipped with white, but the greater coverts largely so, especially those of the secondaries, which are nearly one half white, and form a very conspicuous bar across the wing: the quills have white shafts: the middle tail feathers are dusky, the others cinereous, the outer one margined with white on the exterior web. This according to late observation should be a female, and which we have described, as differing from what was given in the former part of this work.

In the 8th vol. of the *Transactions* of the *Linnean Society* we find descriptions of both sexes of this species under the title of *Phalaropus Williamsii*, differing very little from the usual specific characters. Six females and two males were dissected, by which means it was ascertained that the former sex was rather the largest, and only had the fore part of the neck of a ferruginous colour: the males were variegated on that part with cinereous, rusty, and white.

These were taken in Sanda and North Ronaldsha, the most northern of the Orkney islands, on the borders of fresh water lakes, in the summer; so that no doubt exists of their breeding there. It is remarked that the bellies of the males were deficient of feathers, from which it is supposed that sex alone performs the business of incubation. To this, however, we cannot assent, as it is highly unnatural; but there is no doubt the males take a part in that patient, and necessary duty.

In the stomachs of these were observed the remains of *Onisci* and *Monoculi*.

Mr. Simmonds, the author of this paper, suspecting these might differ from the Red Phalarope, gave them another name; but the variation is so trifling, that it scarcely makes a distinction between their summer and winter plumage, so that no doubt can exist of their being the red species. In

In the *British Miscellany*, mention is made of this bird having been found in those islands above mentioned, in the month of July: and the figure of a female given, proved to be such by dissection. In this the throat is white: sides of the neck bright ferruginous, slightly uniting on the lower part in front; the plumage of the upper parts of the bird appears to be dusky, inclining to rufus-brown, dashed with cinereous.

Some doubts have existed whether the Red and Grey Phalaropes may not be the same species. Had not what we have just related fairly determined the contrary by dissection, we should have entered more on the subject; but we shall here remark, that an attention to the bill which is so essentially different, will leave no doubt in the mind of the critical naturalist. In this the bill is very slender, and acuminated at the point, where it bends a trifle: in the Grey species the bill is not so slender and terminates rather broad, and sub-compressed. Acerbi gives this in his list of Lapland birds.

PHEASANT-COMMON. Phasianus colchicus.

In the *General Synopsis of Birds*, vol. iv. p. 672, the author mentions two instances, to his knowledge, of the Pea-hen having assumed much of the plumage of the male, particularly the ocellated train, or coverts of the tail; one of these, which originally belonged to Lady Tynte, and afterwards preserved in the *Leverian Museum* is represented Tab. 60.

This curious and unnatural change is well known to take place occasionally in the Common Pheasant. The circumstance is not only mentioned by Edwards and Salerne, but an ingenious paper on the subject was given in Vol. 70. p. 527. of the *Philosophical Transactions*, by Doctor Hunter.

Doctor

Doctor Latham says, that the female of the Rock Manakin, is said to obtain the plumage of the opposite sex after a number of years. Age, however, does not appear to be the cause of this singular *lusus* of nature, as we have before remarked; but what the cause may be that produces such a different secretion for colouring the feathers than is usual, or that occasions such a superior luxuriance of growth, as in the train of the Pea-hen, is at present a matter of conjecture only. That few species produce this phenomenon, and those rarely, is well known; and we suspected that this happened only in confinement, until the contrary had been well authenticated with respect to the Pheasant.

This change therefore is not wholly the consequence of domestication; though daily experience convinces us that the want of a variety of food, and range, has produced variety of plumage *ad infinitum* in the Pigeon, the common Fowl, the Duck, and even in the Turkey; though no instance in either of these has occurred, of a complete change in the sexual characters of plumage. The domestic Hen has never appeared in the long tail feathers of the Cock; the Duck has never thrown out the curled middle feathers of the tail. Age, however, will produce some trifling alterations, but it does not appear that such a total metamorphose in sexual plumage is occasioned by extraordinary age, since it has occurred at five or six months old, of which the following is a proof.

From the indubitable authority of the Honorable Rev. George Herbert, we are informed that it is by no means an uncommon circumstance for the hen Pheasant to assume the male plumage in the woods of Norfolk. This gentleman assures us that he shot three such birds last year, (1811,) and further remarks that as a proof of this extraordinary change not being the effect of age, a clutch of eggs that were brought in from the field, in hay harvest, were hatched under a domestic hen, and one of the young females, at the usual time,

in

in the same autumn, when the sexual feathers appear, assumed the male plumage. The head and neck resemble those of the male but are not so brilliant, having a tinge of brown: the breast not so dark: the back and tail resemble those of the female.

A female Painted Pheasant *Phasianus pictus,* bred in the menagerie belonging to the late Lord Carnarvon, at Highclere, became male feathered, and that Nobleman, with his usual politeness and attention to our pursuits, sent the bird to us, accompanied with a letter, stating some particulars concerning her. The purport of the letter was, that the bird was about six years old, and had produced some broods, but that for the two last years she had not bred; that in the spring of the year in which she became barren, or did not lay any more eggs, visible marks of change to the male plumage began to appear, and in the autumnal moulting following, the tail and other coloured feathers were evident marks of this strange assumption of plumage. What additional change took place the succeeding spring was not noticed, but her autumnal plumage of that year was perfected before her decease, which took place on the 10th of Dec. 1803. In this state of change, which appears to have been progressive, there are evident marks of her sex, especially on the back and rump, which had not attained the full yellow, nor the long narrow crimson coverts of the tail: but the beautiful yellow silky crest, and the orange hood on the hind part of the head, composed of long truncated feathers, with their tips barred with purple that fall over the neck, are as perfect as in the male. The putrid state in which the bird arrived, did not admit of any inspection of the ovaries.

From these and many other accounts, it is quite clear, that age has nothing to do with this phenomenon.

In the *Osterly Menagerie*, we are told that some instances had occurred, where the female Painted Pheasant had assumed

sumed the plumage of the other sex. One of these birds belonging to the Duke of Leeds, could only be distinguished from a male by the difference in the eyes, the inferior length of the tail, and want of the spurs.

Edwards speaks of the common female Pheasant in the menagerie of the last mentioned nobleman, having also assumed the male plumage.

We were also favoured with a pied variety of the Common Pheasant hen alive from the present Lord Carnarvon, that had become male feathered; this died of a decayed liver, and was so emaciated as to render the ovaries inconspicuous.

Birds in a state of domestication or confinement, not uncommonly make a total change in the colour of their plumage. A friend had a beautiful Hen of the common domestic fowl, which was kept on account of her beauty and diversity of colours, that after rearing several broods of chicken, became entirely white, and continued so.

Mr. Anstice assures us, that a neighbour has a common Cock of the Java breed, which originally was black and red like some of the English game breed, that on the third year became mottled with white, and in the fourth moulting, was clothed in pure unsullied white.

We are frequently told that it is no uncommon occurrence in the parts of the Kingdom where Pheasants are plentiful, for the male to repair to the neighbouring farm-yards, and propagate with the domestic hens. That those who have related such accounts had been so informed we do not doubt; and we know that birds, reputed to be the offspring of such commerce, have been sold as such, merely to enhance their value; but we have no doubt, that if such a mixture has ever taken place in an unconstrained state, it is extremely rare, and by no means common in confinement. All our many attempts to procure a breed between the male Pheasant and the Bantham hen, as well as the Bantham cock and

Pheasant

Pheasant hen, have proved ineffectual, though attended with every care: we have reason therefore to conclude such a spurious breed is merely accidental, and by no means to be commanded.

We are assured, that a gentleman in the west of England had a mixed breed between the China or Pencil Pheasant, and the common species. However this may be, it has hitherto failed with us.

Both the present and the late Lord Carnarvon, endeavoured to obtain a mixed breed between the Heath Grous, and the Common Pheasant, without effect.

The strange bird which is figured in the *Naturalists Calendar*, and which was supposed to be a hybrid between the Pheasant and domestic fowl, certainly has more appearance of a mixture between the Black or Heath Grous, and the Pheasant; and we should conceive such had not been produced in a state of nature, but had made its escape from some menagerie. If it had been a hybrid produced at large, more would probably have been discovered in the same neighbourhood, as a brood must have existed.

The Common Pheasant though naturalized with us, would soon become extinct, were it not for large domains highly preserved, for as they are great ramblers where they are molested, their appearance, on less preserved property, would be fatal. Nor would even this partial preservation secure a continuance of the breed were not thousands bred annually in confinement, and liberated to replenish the declining wild stock.

There appears to be something more congenial to the habits of the Pheasant in the south-eastern parts of the kingdom than in any other; the slaughter which the public prints occasionally announce, on the estates of Mr. Coke of Norfolk, and some others, exceeds every thing of the kind. But as a proof that the soil, or climate, or both, with other concomi-

tant circumstances, are congenial to the nature of this bird. Mr. Herbert, of St. Andrew's-Hall, assures us, that five years ago, there was not a Pheasant on his estate, and that now he has at least three hundred brace in the small covers round his house, the produce of a hundred and twenty eggs, bought in London four years since. That last sporting season, he killed from his stock, sixty-five brace of Cocks; and this season, he had already killed that number, and intended to kill as many more; having the day before, (2d January, 1812) with four guns, killed twenty-two brace.

But with all possible attention to this noble and beautiful species of the feathered tenants of the woods, few counties can boast of plenty; and the difficulty of rearing the young in confinement, in some situations is so great, that the increase of the stock is scarcely a tenth part of the eggs that are laid.

In the early period of life, the infant Pheasants are delicate in confinement, for want of that food with which nature has so amply supplied their table in the wilderness: yet a large portion with care pass this delicate age, but have still to contend with that period of life when their nestling feathers are to be superseded by adult plumage. This is the time that many droop for want of strength to support so considerable an exhaustion of animal secretion, to the furtherence of that great design. But of all the maladies under which this species as well as some others of a similar nature suffer, there is none so horribly destructive as the *oscitans*, or the distemper usually called the *gapes*. To many who have led a country life, the disease is well known to depopulate the poultry yard; whole broods of Chickens are seized with it, and frequently not a single one is saved.

We have been assured by Lord Carnarvon, that in his Pheasantry, at Pixton, in Somersetshire, not above ten young

ones

ones are brought to maturity out of a hundred eggs, and that the greater number die about the age when the distinction of sexual plumage begins to be visible: at that age his Lordship has generally found the gaping distemper to rage most violently.

Mr. Herbert assures us, that this distemper is very destructive to young Pheasants and common poultry in Norfolk, which is there called *gapes* or *chuck*, and he thinks particularly so to young Turkies. The different effects which this distemper appears to produce in different situations, are certainly remarkable, for though we are scarcely able to rear Chickens or Pheasants in some parts of Devonshire, Turkies rarely fail, although equally infected. These with us never arrive at the critical stage of the disease, that of gaping or difficulty of respiration; and which we attribute to the superior size of the *trachea* in these birds at the time they are affected. We conclude, therefore, that the young broods of Turkies are more early attacked in Norfolk than in Devonshire, since we have neither lost a single young one ourselves, nor can we find that any have been known to die of it in this part of the kingdom.

Mr. Herbert further says, that he suffers much more in his poultry yard than in his pheasantry, but that he greatly attributes his success in rearing Pheasants, to the celebrity of his keeper, who being aware that the disease was occasioned by worms, treated it as is usual with other animals having a vermicular complaint. How far the nosological knowledge of this æsculapian keeper, or even his physiological enquiries may have directed his prescription, we shall not here discuss, but we cannot suppose that a pellet or two of rue, mixed with butter, with which the Pheasants are crammed, can produce that beneficial effect he seems to ascribe to it. Those who know but little of anatomy are aware that what passes down the *œsophagus* or gullet, can have no direct communication

with the *trachea* or windpipe; and, therefore, the rue, which might be administered as a remedy for worms in the stomach or intestines, cannot reach the seat of the disorder in a direct manner, and that its nature must be completely altered, by the subtle parts of it only having been taken up by the absorbents, and conveyed to these vermes, through the circuitous means of the circulation of the blood. We must, therefore, attribute the great success of this person, to a meritorious attention to the young Pheasants, in keeping them clean, and by administering plenty and variety of food, especially such as in their wild state would be their infant aliment. Perhaps too the distemper in that situation may not commence so early; for in that, the life of the affected greatly depends. Rapid growth, which can only be insured by warmth and plenty of nourishing food, will save many, for it is by increasing the size of the *trachea*, that they are prevented from suffocation.

The merit however of our friend's keeper, in the rearing young feathered game, is deserving of record, since in the last season, out of one hundred and five Pheasants that were hatched, ninety-four went off to the covers full grown, one was killed by accident, and eight only died of the distemper. Of Partridges, he reared one hundred and sixteen out of one hundred and twenty-nine, having lost only thirteen by the gapes. In the preceding season, he only lost two Pheasants out of sixty-six that were hatched; and he thinks he would engage to rear, including accidents of all sorts, ninety out of every hundred.

With all the merit that is due to Mr. Herbert's keeper, it must be observed, that much is to be attributed to the locality of situation; experience has clearly demonstrated, that at the short distance of a hundred yards, or perhaps less, from where the distemper fatally rages, a cottager, who continually breeds Chickens, never discovered that his were ever

ever affected, and scarcely fails in rearing the whole of every brood.

It may not be thought foreign to our enquiries, to remark in this place, that we suspect Chickens which are hatched, and for a time are kept within the influence of a cottage fire, are continually inhaling a preventative to the vermicular distemper. The smoke of wood or peat is saturated with akali, whose caustic quality either prevents the propagation, or destroys the worm in its infancy. It is most probably to this quality, that the fumes of tobacco have been found infallible in the *oscitans*, as will be more particularly noticed hereafter; and we really suspect that most vegetable smoke will be found to be beneficial. Few persons have been exposed to the smoke of wood in combustion, that have not had their eyes sensibly affected by its pungency, and which applied to the tender surface of the worm in its passage through the *trachea* by respiration, is doubtless the secret by which these vermes are destroyed in their infancy amongst the cottagers.

It should, however, be remarked, that as this destructive disease is occasioned by a worm of the genus *Fasciola*, which by some means is propagated in the *trachea* or windpipe, all situations do not equally produce the annual mortality in the infantine race of some of the Gallinaceous tribe. We have been told that the disorder is not so deadly in Norfolk, amongst the young domestic Pheasants, as in some other parts, which is verified by Mr. Herbert's account, and it is reasonable to suppose, that the malignancy of the distemper is variable, even in contiguous places.

We have been assured that a person in Devonshire, could never rear any Chickens upon one farm, that laid high, and yet at no great distance in a low situation, a Chick is rarely lost. This, however, is not generally the case, for instance the Pheasantry at Lord Carnarvons, is in a valley surrounded by hills. In the neighbourhood of Kingsbridge, we have

observed whole broods affected in all situations, but none in which the vermicular distemper is more constant than our own, which is a remarkable dry spot upon an eminence. Under such circumstances, it is more probable, that soil, not situation, may more or less produce this disease, and possibly some species of vegetable may be common in some soils, that may be an antidote.

The *oscitans* or *gapes*, is not as we formerly suspected, confined to the western parts of England, for we are assured from good authority, that it is partially known in almost all the southern and south-eastern counties; but there appears intermediate local situations in which it has not been noticed.

Until we endeavoured to investigate the nature of this distemper, the cause was unknown to us, yet it seems some of the good housewives had discovered, that the Chickens which died of the *gapes*, had worms in the throat, and had administered urine and rue as a remedy, and some have declared with effect. We do not, however, intend to enter into a full detail of our experiments, in order to discover a remedy for the disorder, but only relate those which appear to be most efficacious. With respect to the vermis, which is the cause of the disease, a description of it is useless in this place, since it has been published in the Memoirs of the Wernerian Natural History Society, accompanied by a figure, and is considered a new species of *Fasciola*.

It cannot fail to be highly interesting to the community at large, to be informed of any remedy for so fatal a disease, and thereby rescue from premature death a large portion of those useful animals, the domestic poultry.

Garlic, and the whole tribe of *Allium*, appear to have been administered with some advantage as a vermifuge in this case, but is by no means to be depended on as certain in its operations, in the different advanced stages of the disease.

It

It may be administered in two ways, but the most effectual is a strong infusion, which should be their only drink; at the same time chives or young onions chopped small, and mixed with meal, may be administered once or twice a day as their food. It should, however, be recollected, that it is in the early stage of the distemper, that benefit is to be expected, before the violent irritation of the vermes has caused inflammation; and if in such a situation where the distemper is prevalent, this course of medicine was administered, at a week or a fortnight old as a preventative, it might be beneficial.

The situation in which these *Fascioli* are lodged, renders it impossible to administer any thing direct, for any remedy applied to the interior of the *trachea* would be worse than the disease: whatever therefore is adopted to dislodge these worms, must be effected either by fumigation, absorption through the skin contiguous to the part effected, or through the circulation.

Having observed how powerfully garlic is absorbed and communicated to the whole frame of a human being, by only applying it to the soles of the feet, (the breath in particular becoming most offensive under its influence, where thus used for the hooping cough) we considered that this powerful herb might be noxious to these worms, who live by sucking the secretion of the mucus membrane of the *trachea*, and consequently compel them to quit their hold, and allow the Chickens in their fits of coughing to discharge them. That benefit has been derived from this medicine is without doubt, and we cannot assign any other means of its action.

In the advanced state of the disorder, nothing is so effectual as fumigation, the inhaling of the steam of medicated liquors, or the smoke of some narcotic herb, are the only methods of applying any remedy directly to the part affected; and of these, tobacco stands foremost as the readiest, from being

being so generally in use, and so easily applied in the form of fumigation; and we are happy to say, that if it is properly administered, it is an infallible remedy. In order to administer this fumigation in sufficient quantity, there is some care required, that the Chickens (which must be confined in a close vessel) are not suffocated. We have repeated this operation with the utmost success, by confining the diseased chickens in a box, with a door on one side about half the height of the box, with its hinges so placed as to open downwards. By this means the interior can be examined from time to time, in order to observe the density of the smoke, and the state of the chickens. To a person in the habit of smoking tobacco, there is no difficulty of lighting a pipe, and by introducing the bowl through an aperture, the smoke may be blown in till it appears considerably dense, which must be examined every two or three minutes.

When any of the Chickens become stupified by the narcotic quality of the fumes of the tobacco, the operation of blowing the pipe should cease; and as fresh air will rush in when the door is opened, there will be no danger of suffocation. If, however, any should appear to be more exhausted than the rest, or than is requisite, they should be taken out, and they will soon recover, when removed from the smoke. We have found, that the longer the Chickens are confined in the smoke the better, but that a certain degree of density is required to destroy the worms by its caustic quality. As dense a smoke, therefore, as the Chickens can continue to exist in, is best, and the criterion is stupefaction and the loss of the use of their legs: when that effect appears, no more smoke should be introduced.

As soon, however, as the Chickens recover the use of their legs, they may be suffered to remain in the fumigating box for two or three hours; but remembering that the inhaling of a large quantity of smoke in half an hour, will be more effectual, than a whole day confined in a small quantity. We

We have been assured by a very respectable gentleman farmer in the north of Devon, that Calves are subject to a similar distemper, and that he had found the fumes of tobacco infallible. Mr. Barret, of Teignmouth, informs us, that the *oscitans* is so prevalent amongst the Chickens in that neighbourhood, that more than one third of a brood usually die; but that he found the greatest success from fumigating with tobacco. This gentleman says that he puts the whole brood (as soon as any symptoms appear) under a close vessel, and then introduces the bowl of a tobacco-pipe, filled with the herb, which is blown through till the pipe is burnt out. That the Chickens after a little time appear to be dead, but by leaving them in the smoke they revive; and that he never had occasion to fumigate more than three times, and in no instance lost a single chick either in or after the operation. However this gentleman's experiment may have corroborated our own with respect to the fumigation of tobacco being an infallible cure for the vermicular disorder, there certainly requires some care in the operation being performed in a close vessel. It cannot be intended to convey an idea that any vessel air-tight should be used, and consequently, the danger of suffocation is more or less, according to the size of the vessel, the density of the smoke, and the means by which fresh air can enter. Experience has convinced us, that some caution is requisite, as by a continuance of dense fumes, after great debility had been excited in the Chickens, we have produced irrecoverable suffocation in a box, where the seams were by no means air-tight.

It may be acceptable to some of our readers to remark, that if a metallic tube of about an inch diameter, and two inches long be made to fit into a hole on the side of the fumigating box, and a smaller tube that fits the nose of a pair of bellows be fitted into the larger tube, the fumes may be more conveniently blown into the box. But as the tobacco cannot

cannot be brought into combustion without drawing the air through it, as it must be lighted at the top, a small piece of slow match should be placed in the centre of the pipe, and the tobacco pressed in on every side. The slow match may be prepared of that soft and slightly twisted cord with which sugar loaves are usually bound; this soaked in a weak solution of nitre, in the proportion of a dram and a half, to half a pint of water, then gently squeezed, and hung to dry will be fit for use. This is easily lighted and continuing to burn, communicates combustion to the tobacco from the top to the bottom of the tube, and greatly facilitates the operation of fumigation.

The powerful effect of the tobacco fumes is communicated through the lungs of birds into every part, and no culinary preparation can render the flesh of a Chicken palatable, that has been killed under the operation of fumigating with it.

In no stage of the complaint, has the fumigation failed, and we recommend its application three times in three successive days; and when the craw is empty, and not after feeding.

We shall now quit the subject, with a pleasing reflection, that what has been said, may be the means of preserving from a premature and useless death an animal so essential to the comforts of mankind, as our domestic fowl. To those, however, who may not have noticed the symptoms of this deadly complaint, it may not be improper to remark, that as soon as Chickens are observed to cough, or as it is commonly called sneeze, no time should be lost; for in a few days after a difficulty of breathing comes on, known by their necks being stretched out, and the mouth opened, then called the gapes: after which, a week or ten days puts an end to their existence in a fit of suffocation, the *trachea* being filled with the *Fascioli*, totally obstructs the passage to the lungs, and consequently respiration ceases.

Probably

Probably this disorder is confined to the Gallinacious tribe, for though the common domestic Fowl, the Turkey, the Pheasant, and the Partridge in confinement, are equally liable to the vermicular distemper; neither the domestic Duck nor yet the Pigeon, have been known to be affected, though living together and partaking of the same food.

We have opened the *trachea* of a great many Chickens that have died by suffocation, and have found these vermes alive long after the Chick has been cold, and holding so firmly by one of their arms, (for they have two, with a sucker or mouth on each) that they were with difficulty separated without breaking.

As a concluding remark, it may not be improper to add, that when we assert, that the distemper to which all the species of the Gallinacious tribe before mentioned are subject, it is from ocular demonstration, and we can speak positively as to the vermes in all being of the same species.

In addition to the urinal medicine, the rue, and the garlic, Lord Carnarvon thinks that senna has been administered with some beneficial effect. But we must not omit to mention a recipe which Sir William Elford assures us the superintendant of his poultry yard has used with advantage. This is the application of the essence of ambergris to the nostrils by means of a feather. We do not, however, attach more expectation of benefit in this, than in a long list of other nostrums; especially as we can positively assert that it has been tried on Pheasants repeatedly, without the smallest effect, the birds dying under its administration. From our own experience, and from all the information we can collect, fumigation with tobacco, is, at present the only certain remedy discovered; and which we most earnestly recommend to those interested in breeding of Poultry, or Pheasants.

PICK-A-TREE. Vide Woodpecker-green.

PICKET. Vide Tern-common.

PICKMIRE. Vide Gull-black-headed.

PICKTARNE or PICTARNY. Vide Tern-common.

PINNOCK. Vide Titmouse-blue.

PLOVER-ALEXANDRINE. Vide Plover-ring.

PLOVER-CREAM-COLOURED. Vide Cursorius Europæus.

PLOVER-GOLDEN. Charadrius-pluvialis.

Rural Sports, ii. t. p. 456.

Bewick Br. Birds, i. t. p. 340.

This species begins to change its plumage early in the year; a specimen shot on the 10th of March in Devonshire, had the whole under parts mixed black and white, from the chin to the vent; the black is least predominant across the upper part of the breast, the most on the belly and sides.

By some called Yellow Plover.

PLOVER-GREAT. Vide Bustard-thick-kneed.

PLOVER-KENTISH.

Lath Syn. Sup. ii. p. 317.

Lewen Br. Birds, t. 185.

Charadrius Cantianus. Index Orn. Sup. p. 66.

In the former part of this work, we made mention of this bird under the head of Ringed Plover, of which we suspected it might be a variety; and we are by no means at present convinced of the contrary, for in fact the description given of it, differs so little from some of the immatured Ringed Plovers, except in the colour of the crown of the head, that we are bound to express our doubts. As, however, we have such excellent authority as that of Doctor Latham, for continuing it as a distinct species, we shall take the liberty of copying his description.

"Size of the Ringed Plover: length six inches and a half; breadth

breadth fifteen inches: weight an ounce and a half: the bill is black: top of the head ferruginous-brown, bounded on the fore part with black; but the forehead is white, and passes over the eye, and a little beyond it: from the bill through the eye a black streak, broadening behind the eye and reaching over the ear: all beneath, from the chin to the vent white, passing round the neck as a collar: on each side the breast, next to the shoulder of the wing, is a black patch: back and wings pale brown: quills dusky; the shaft of the outer one the whole of the length, and the middle of the next white: the greater coverts for the most part tipped with white: tail rounded in shape, not unlike the quills: the three outer feathers white, except a dusky spot on the inner web of the outmost but two; the others have the basis very pale half way, but the two middle ones are of one colour."

We shall here take the liberty to remark, that at this moment we have two immatured Ringed Plovers before us, exactly corresponding in markings with the above, except in the crown of the head being brown, dashed with rufous; and the tertials of the wings are slightly tipped with white, that when the wings are closed look like the greater coverts, and might in a stuffed bird be readily mistaken. By a comparison also with the variety of the Ringed Plover, called the Alexandrine Plover, the difference is so trifling, except in the crown of the head inclining more to ferruginous-brown, that they appear to be varieties slightly removed from each other.

"I received the above" (says Doctor Latham) "from Mr. Boys, of Sandwich, 23d of May, 1787, being shot in that neighbourhood; and in the month of April, 1791, two others; the weight of these was about twenty grains more than the former: the bill and legs were black: in one of them the whole nape was of a fine pale reddish-bay, the other pale brown, inclining to bay towards the nape: the three outer tail-feathers white, but the inner of these inclining to dusky

on

on the inner web; the next very pale brown, or brownish-white, with a dusky tip; the four middle ones brown, with the ends dusky, approaching to black: in other things they were like the first described; but in one of them, the black patch at the bend of the wing, was much larger and approached on each side towards the breast."

In the description of these last, it is admitted that one of them was only pale brown on the head, inclining to bay on the nape; and also that the black patch at the bend of the wing was larger and almost met on the breast. Here then we appear to have almost a direct intermediate stage between the Ringed Plover of the first year, called the Alexandrine Plover, and the adult Ringed-Plover.

Doctor Latham remarks, that the Kentish Plover cannot belong to the Ringed Plover in any stage, as the bill and legs will testify, "for in the last, (says the Doctor) both of them incline more or less to yellow or orange, even whilst very young, and in the adult are ever of a fine orange."

We do not agree with our worthy friend, that in the adults the Ringed Plovers have the base of their bills and legs more or less yellow; but before that period the bill has rarely any yellow, and the legs are variable from dusky, to pale yellowish-brown, according to age, and their approach towards maturity; as represented in the Alexandrine Plover, which as we have before stated is without doubt the Ringed species in the adolescent state.

PLOVER-LONG-LEGGED. Charadrius-himantopus.
Shaw Zool. Lect. i. t. 80.
Nat. Miscel. t. 195.

A bird of this rare species was shot in Anglesea in the year 1793, an account of which is related in the *Naturalists Miscellany*, as received from Mr. Davies of Aber.

Is sometimes called Longshanks.

PLOVER-RINGED.

PLOVER-RINGED. Charadrius Hiaticula;
Charadrius hiaticula, Lin. Syst. et. Ind. Orn.
Charadrius Alexandrinus, Ind. Orn. ii. p. 744.
Muller, Zool. Dan. Prod. No. 210.
Brun. Orn. p. 77.
Alexandrine Plover, Lath. Syn. v. p. 203. Id. Sup. ii. p. 315.
Ringed Plover, Lin. Trans. vii. p. 281,
Bewick Br. Birds, i. t. p. 345.

PROVINCIAL.
Ring-Dottrell, Sand-Lark.

As we have not the least doubt that the bird usually described as a distinct species, under the title of *Charadrius Alexandrinus*, is no other than the Ringed Plover in its adolescent state, we have connected their synonyms. But as we cannot speak with the same degree of confidence with respect to *Charadrius Cantianus*, we have for the present assigned it a separate place.

Soon after the publication of the second Supplement to the *General Synopsis of Birds* we had occasion to deliver in a paper on several subjects of Natural History to the *Linnean Society*, and took that opportunity to express an opinion upon the birds in question: and as nothing since that period has occurred to induce a different opinion, we cannot give our sentiments in this place better, than by transcribing those published in vol. vii. of the *Transactions* of that Society.

"In the *Ornithological Dictionary* it will be seen, that some doubts are entertained, whether the Alexandrine Plover, *Charadrius Alexandrinus* of Linnæus, and the Kentish Plover of Lewin, are not really varieties of the Ringed Plover: such doubts cannot but exist with those who have had the same opportunity of examining the number of specimens we have at all times of the year; and we confess that additional, and more recent observations have so

strengthened

strengthened our former conjectures, as to leave the mind with scarcely the shadow of a doubt, that they are actually one and the same species.

When the size and weight, the manners and habits of similar birds are consulted, and found to be the same; when the plumage of such is so nearly alike, except in a few markings, which are variable by age, and season; when gradations are to be traced from the markings of one to that of the other; and when such birds always congregate together; we must be naturally led to conjecture, that naturalists, who have not had the same opportunities of attending them in their native haunts, and have only examined a few individuals, perhaps in their extreme dissimilitude of plumage, might without committing their scientific knowledge, describe them as distinct species. It must, however, be acknowledged, that the actual criterion, is the tracing of such doubtful subjects through their several changes, from the nestling to the adult: such has been our usual plan where opportunity permitted.

On the present question, were it not for the strong chesnut colour the Kentish Plover is said to possess on the crown of the head, as described by Lewin, and since by Doctor Latham, in his second Supplement to the *General Synopsis*, we should not have hesitated in pronouncing these three birds to be only one species; for the marks of distinction on which so much stress is laid by some persons, will by no means hold good, not only with respect to this, but also to many other species of birds, as we can prove from ocular demonstration.

There is indeed nothing more vague and indeterminate, than the colour of the legs and bill: a circumstance that has already led to much confusion, and of which we beg leave to put the young and inexperienced Ornithologist upon his guard.

It would be endless to adduce instances of these uncertain marks

marks, more or less changing by age and season, so well known to those who search for truth amongst nature's stores: the examples of the Black-headed and Herring Gulls, hereafter mentioned in this paper, are sufficient to shew the care requisite in admitting the colour of those parts as the only specific distinction.

The colour therefore, of the head alone, in what is described as the Kentish Plover, is the only circumstance that could stagger our opinion; and we must still conjecture, that the bird figured by Lewin is only an accidental variety; for it is admitted in the second Supplement to the *General Synopsis*, (the author of which sent the description to Lewin) that this part of the bird has its gradations. In the first described specimen, the top of the head is ferruginous-brown; and with respect to the two other specimens, killed in the month of April, it is stated, that "in one of them the whole nape was of a fine pale reddish bay, the other pale brown, inclining to bay towards the nape."

"We shall now take leave of these birds for the present, by remarking, that we have repeatedly taken the young of the ringed Plover before it could fly, and, we believe, in all the usual intermediate changes of plumage in every month in the year; and we do assert, that in its infant state, the legs and bill are not yellow, though paler than they are after it has attained the power of flying, when they become of a dusky-brown, and continue that colour for a considerable time, changing by degrees to a yellow-brown, and lastly to an orange-yellow; but this last change is never effected till the plumage is nearly complete, and is usually the last mark of perfection.

At this time (January) we have before us fresh specimens of this species, with all the marks of adults, except that the bill and legs do not possess the full yellow; at the same time we have others agreeing with the Alexandrine and Kentish

Plovers, but with the crown of the head pale brown, some more or less tinged with rufous; and the white which passes over the eye from the forehead, not quite running into the ring of that colour round the neck, but in some so near it as not to admit of a specific mark of distinction; the bill and legs dusky."

We had in June 1811, a Ringed Plover alive, that was taken in the month of December preceding, at which time it had as nearly all the characters of the Alexandrine Plover, as may be expected in a subject liable to variation. The bill was dusky and the legs brown: the head and breast destitute of the black bands; and except that the white which passed from the forehead over the eye did not quite join the white ring round the neck, there was no difference whatever between this bird and the description given of the Alexandrine Plover. In the month of March the feathers which constitute the black band behind the white one on the forehead, and the dark feathers on the middle of the breast, which unite the brown on the sides, and form a band on that part, began to appear. Before the middle of April, my Alexandrine Plover (as I suspected) was in the complete plumage of the Ringed Plover, the bill was as usual yellow, except at the point: but the legs were still brown with scarcely a tinge of yellow. From the deep colour of the black on the head and breast, there is reason to suppose this bird was a male. Whether this species after having arrived at maturity, makes any autumnal change, we have not yet been able to determine; but probably it is only the young birds which are not maturely feathered till the following spring, that have been described as distinct species.

This little bird continued in high health till it was killed by a Cat, having been generally fed upon worms, in order to produce the full and proper plumage expected, by its most natural food; but it had occasionally eaten flesh minced small.

We need not add any thing to the above observations, but that

that Doctor Latham makes the weight of the Kentish Plover not much more than an ounce and a half; and the length six inches and a half. This is certainly less than the usual weight and measurement of the Ringed Plover, which weighs from two, to two ounces and a half, and is generally more than seven inches long.

The name of Ring Dottrel has been applied to this bird in some parts, as well as that of Stone Plover, which last has also been given to the thick-kneed Bustard.

We took an egg from the nest of this bird, and after carrying it a great many miles, were surprised to find the young one in it alive, and actually chirping at the end of three days, notwithstanding it had been deprived of its accustomed warmth. This is a proof that eggs, or rather the embrio young, are not easily destroyed by moderate cold, comparatively speaking, as relative to the temperature of a breeding bird, at a certain period of incubation. A small crack in the shell had given the young the means of respiration, and consequently of uttering sound.

The Ringed Plover is entirely a shore bird, residing there the whole year, and picking up its sustenance from the rejectamenta of the sea.

It is probable those of the northern parts of Great Britain, go southward after the breeding season. Mr. Bewick remarks, that these birds are common in all the northern countries; and that they migrate into Britain in the spring and depart in autumn. From the northern parts of England they probably migrate, but in the southern parts many are observed through out the year.

This species has been observed in New South Wales; and it is remarkable, that except the Snow Bunting, this is the only bird which Linnœus observed upon the snow-capped mountains of Iceland; probably accidental.

PLOVER-YELLOW. Vide Plover-golden.

POCHARD. Anas ferina.

Lath Syn. Sup. ii. p. 354.

Lin. Trans. iv. p. 116. t. 14. f. 5. 6. (trachea).

Bewick Br. Birds, ii. t. p. 356.

PROVINCIAL.

Vare-headed Wigeon. Attile-Duck. Red-headed Poker. Great-headed Widgeon. Blue Poker. Dun-cur.

This species though sometimes taken in the decoy pools in the usual manner, are by no means welcome visitors; for by their continual diving, they disturb the rest of the fowls on the water, and prevent their being enticed into the tunnels: and we are assured that they are not to be decoyed with the other Ducks.

Pochards, like other wild fowl, were taken in much greater abundance formerly, and in a very different manner.

In a common decoy pool there are three or four arms, or narrow cuts leading from the pool: these are usually at opposite angles, and decrease towards their extremity: over the further end of these, sticks are bent and covered with netting, which terminates with a net laid on the ground. If into either of these tunnels the birds are decoyed, (by tame ducks constantly fed in those places) they are unable to return, the decoy man who is hid behind reed fences, shews himself at the mouth of the tunnel, and by that means the wild birds after trying to escape by flying up, being stopped by the net above, push up the tunnel, creep into the hooped net on the ground and are caught. It sometimes happens that the Ducks on a decoy are lazy, and will not follow the tame ones; in this case recourse is had to a singular stratagem. A dog having been taught to run forwards and backwards through some small holes left for that purpose at the bottom of the reed screens, frequently induces the fowls to approach;

approach; but it is sometimes requisite to tie something red round the dog's neck, in order to stimulate the curiosity of the fowls. In the whole of this business the decoy-man must carry on his operations to leeward, least the fowls smell him, which would instantly rise the pool.

The method formerly practised for taking the Pochard (as we have been informed from good authority) was something similar to that of taking Woodcocks. Poles were erected at the avenues to the decoy, and after a great number of these birds had collected for some time on the pool, (to which wild fowl resort only by day, and go to the neighbouring fens to feed by night,) a net was at a given time erected by pullies to these poles, beneath which a deep pit had previously been dug: and as these birds like the Woodcocks, go to feed just as it is dark, and are said always to rise against the wind, a whole flock was taken together in this manner; for when once they strike against the net, they never attempt to return, but flutter down the net till they are received into the pit, from whence they cannot rise, and thus we are told twenty dozen have been taken at one catch.

The *tracheal* labyrinth belonging to the male of this species is (as Dr. Latham observes) something like that of the Scaup, and though it is quite impossible to give an adequate idea of it by description, the comparative description given in the second Supplement to the *General Synopsis* may be useful:

"The *trachea* is shorter, but otherwise like that of the Scaup, and of nearly the same diameter throughout. The drum-like labyrinth is more round on the upper side, but crossed with a small bony partition, as in that bird. The bony box of which the other portion consists, is scarcely elevated on this side, and on the other much less so than in the Scaup; it likewise forms an obtuse angle with the rest of the trachea, but in the Scaup, it does not deviate from a continuation of a straight line, though forming a considerable enlargement."

Where any doubts exist, we recommend a consultation of the figures of this and other trachea given in the fourth vol. of the *Linnean Transactions*.

It has been said, that this species will not live in confinement; on the contrary, no bird appears sooner reconciled to the menagerie. One now in our possession, that was badly wounded with a broken wing, took to feeding on corn immediately, and is now, after three years confinement, very tame and in high health.

POKER.

A common name in Lincolnshire, for many species of the Duck tribe: the Pochard is called Blue Poker and Red-headed Poker; the Wigeon is termed Wigeon Poker; the Tufted Duck, Black Poker; and another species we could not ascertain, is called Red-eyed Poker, which we suspect is also the Pochard, the only species of British Duck we believe that has a red eye.

POPE. Vide Puffen and Finch-bul.

PRATINCOLE.

A genus of birds, the characters of which are:—bill short, strong, convex above, and hooked at the point: gape wide: nostrils near the base of the bill, linear, oblique: toes long, slender, connected at the base by a membrane: tail much forked, consisting of twelve feathers: wings long and pointed, the exterior feather the longest.

PRATINCOLE-AUSTRIAN.

Hirundo Pratincola, Lin. Syst. i. p. 345. Gmel. Syst. i. p. 699
Glariola Bris. v. p. 141. t. 12. f. i.—Id. 8vo. ii. p. 248.
Glariola austriaca, Ind. Orn. ii. p. 753
Hirundo marina, Raii. Syn. p. 72.—Will. p. 156.—Id. Angl. p. 214.

La Perdrix de Mer, Buf. vii. p. 544—Pl. Enl. 882.
Austrian Pratincole, Lath. Syn. v. p. 222. t. 85.—Lin. Trans. ix. p. 198.

A bird of this species very much resembling the *Coromandel* variety, described by Dr. Latham, was shot near Liverpool, on the 18th of May, 1804, as we have been assured by Mr. Bullock, to whom the bird was brought before it was cold, which specimen is now in the collection of Lord Stanley.

It was shot in the act of taking beetles on wing, the remains of which were found in its stomach. Was thought to be a male.

Lord Stanley favoured us with an excellent drawing of this bird, from which we took a description. But having been since favoured with a specimen from Mr. Vaughan, that exactly corresponds with the bird in question, some of the deficiencies incidental to drawings have been supplied, and a more perfect description taken from this specimen.

The length is about ten inches. Bill black, short, convex or arched, the upper mandible pointed, slightly hooked, and longest; under mandible at the base, and corners of the mouth coral-red: irides said to be reddish. The colour of the plumage on the upper parts of the bird is brown; the crown of the head, and the neck above, are tinged with rufous; the back and scapulars, slightly dashed with greenish-bronze: the throat is yellowish-buff: from the lower part of the eye originates a black line, which passes round below the throat, and encircles that part: across the lower neck, and upper breast, the feathers are rufous-brown: the lower breast buff, like the throat: the belly, sides of the rump, and coverts of the tail, both above and below, are white: the wings are very long, and formed like those of a Swallow, being extremely narrow, and having the first feather the longest; the prime quills are dusky-brown; the secondaries

are

are paler, slightly tipped with white; the tertials and coverts, like the scapulars: along the edge of the wing, close to the *alula spuriæ* is whitish: the under coverts of the wings are partly bright ferruginous, and partly black, the middle series being of the former colour: the long feathers on the sides of the body, close to the junction of the wings, called the under scapulars, are also of the same ferruginous colour: the tail, like the common Swallow, is greatly forked, the feathers more or less white at the base, with their ends dusky-brown, but the last does not occupy above one third of their length, except in the middle ones; the outer feather is very slender, and nearly an inch longer than the second, the others decrease in length proportionably, till the whole length of the four middle feathers is not above half so long as the outer: legs and toes rufous-brown; claws dusky-black, not much hooked, and the middle claw long, imperfectly pectinated on the inside, and truncated.

The bird from which this description is taken (being exactly like that in the Museum of Lord Stanley, as we before stated) came from Senegal.

There appears to be several varieties of this species, occasioned most likely by age. Dr. Latham specifies four varieties, under the titles of Collared, Maldavian, Coromandel, and Madras, indicative of the countries they have been found to inhabit: and if these are really the same, it is a very widely extended species. Probably the *Senegalensis* is another variety, or rather the young of the *Austriaca* before it puts forth its adult plumage, being of a general brown colour: and we are the more inclined to believe this, since the Coromandel variety of the Austrian Pratincole has been identified at Senegal. If this should really be the case, there is but one other species of the genus, the spotted Pratincole, *Glariola nævia.*

We are informed this species inhabits Germany, particularly the

the borders of the Rhine, near Strasburgh, and is sometimes seen in France, especially Lorraine; but is most plentiful in the deserts towards the Caspian Sea, frequenting the dry plains in great flocks. Is also common throughout the whole desert of Independent Tartary, as far as the rivers Kamyschlossca and Irtish, but no further in Siberia; and in general is not observed beyond 53 degrees to the northward.

It will be observed, that Linnœus placed this bird with his *Hirundines*, to which, in some particulars, it has considerable affinity, though its bill and legs certainly constitute characters sufficently distinct to remove it from thence: but why it has been taken from the land division, and placed amongst the water birds, we are unable to discover. Its habits, as well as the shape of its wings and tail, greatly resemble those of the Swallow: like that tribe, it frequently resorts to rivers and other waters, and, like the Sand Martin, makes a nest in the holes of sandy banks, and lays six or seven eggs. Similar to the Swallow tribe, it is continually on wing, and seems to take its food always in that manner, but instead of soft insects suited to their tender bills, the Pratincole, whose bill is strong, wages war against the *Coleopterous* tribe, perhaps *Dytiscus*, and other aquatic insects. Its legs indeed are rather long, and bare a little above the knee, a circumstance, that seems to have induced an opinion that it may occasionally wade into the water, like the Sandpipers, which, in the legs and toes, it much resembles: but we do not find any mention made of such a habit. Besides it is unlikely that it should entirely leave the neighbourhood of water, and spread over the sandy deserts of Tartary, and other such arid parts, if it was semi-aquatic. To this part, therefore, of its structure, we must assign the cause of the removal from the Order *Passeres* to that of *Grallæ*.

It is true the titles of *Hirundo marina*, and *Perdrix de Mer*,

Mer, should imply an aquatic habit, but further we are not informed.

There can be no doubt, that formed as this species is, for long and rapid flights, it is migratory, shifting its quarters with the season, and that those which go so far north as 53 degrees, return southward after the breeding season.

Since the above was written, we have been favoured with the examination of the only specimen ever taken in England, from Lord Stanley, and found it to exactly correspond with that from which our description is taken.

PTARMIGAN.

We are informed by Lord Stanley, that this species of Grous has bred in confinement in Ireland, as he has been assured by the person who saw both the parents, and their young while they were small. His Lordship thinks these were in the possession of Lord Shannon.

PUFFIN. Alca arctica.

It is an unusual circumstance for this species to remain on any part of our coast in winter, but in the most temperate part, the south of Devonshire, it occasionally occurs at that season. A specimen brought to us on the 27th of February, 1811, had the feathers between the bill and eye dusky, extending also round the eye: the cheeks and chin grey: the bill and legs not so orange as in summer.

The egg of this bird is sometimes obscurely speckled with cinereous.

Few birds have acquired so many provincial names as this; for besides those before mentioned, it is in the Orkney and Shetland islands called Tommy, Tomnorry, or Taminorie; and, in the south of Scotland, Bass-cock, Ailsa-cock, Tomnoddy, Cockandy, and Bowger.

PUFFINET. Vide Guillemot-black.

QUAIL. Perdix Coturnix.

Lath. Syn. Sup. ii. p. 280.

Bewick, Br. Birds, i. t. p. 320.

Dr. Latham remarks that he has known two instances where twenty eggs have been found in the nest of a Quail. This prolificacy is the occasion of the immense flocks that are annually noticed on their passage, spring and autumn, in various parts of the south of Europe, especially in the Crimea, and borders of the Black Sea.

In the island of Stefano they arrive in great flights in the month of May, from the coast of Africa.

If full credit is to be given to Baron de Tott, these birds migrate by night; a circumstance apparently extremely unnatural, because, none of those birds, whose natural habits oblige them to feed by day, and roost, or repose by night, can see distinctly after the dusk of the evening, and are so foolishly blind, and so extremely fearful of flying, that nothing but alarm can force them to take wing. Thus it is asserted, that these birds, during the fine weather, are dispersed over the Crimea, but assemble at the approach of autumn, to cross the Black sea, over to the southern coast, whence they pursue their course into warmer regions: the order of this migration is said to be invariable. Towards the end of August, the Quails, in a body choose one of those serene days, when the wind blowing from the north at sun-set, promises them a fine night; they then repair to the strand, take their departure at six or seven in the evening, and have finished a journey of fifty leagues by day-break. Nets are spread on the opposite shore, and the bird-catchers waiting for their arrival, take them in great abundance.

Such an account has all the appearance of theory, not only from the preconcerted plan of migration, and the unnatural time

time of flight, but also the time stated for the performance of so short a journey for an aerial animal endowed with such powers of rapid transportation. Instead of the distance of 150 miles, requiring the whole of an equinoxial night (12 hours), such a journey would with ease be performed in less than 2 hours.

It is only nocturnal feeders that fly by night, as we have before noticed; and these are either of the aquatic kind, or soft, and long billed birds, (nocturnal birds of prey excepted) who feel out their food, and are capable of finding it by other means than that of sight. Whereas granivorous birds cannot feed even by moon-light, and actually require day-light for all their operations; and sleep by night.

In respect therefore to the migrative part of the above account, it is unnatural and inconsistent with daily observations; but that vast numbers of Quails visit and re-visit the borders of the Black Sea twice in the year cannot be doubted.

M. Galt in his Voyages and Travels, speaks of the migration of Quails from the Continent of Europe, in Sept. to Sicily. "Being fatigued by their flight," says our author, are easily shot on their arrival. The pleasure which the Palermitans take in this sport is incredible. Crowds of all ages and degrees assemble on the shore, and the number of sportsmen is prodigious." The number in boats is described to be greater than those on land, and all impatiently watching night and day the expected arrival of the Quails. "Enviable is the lot," says this writer "of the idle apprentice, who, with a borrowed old musket or pistol, no matter how unsafe, has gained possession of the farthest accessible rock, where there is but room for himself and his dog, which he has fed with bread only all the year round for these delightful days, and which sits in as happy expectation as himself for the arrival of the Quails."

The Quail remains all the year in Portugal, and we are assured by an excellent sportsman, Captain Latham, that he thinks

thinks they are more plentiful in that country in winter than in summer.

That the migration of these birds was well known in the early part of the christian era, is evinced by several passages in the sacred writings. In the passage of the Israelites out of Egypt, we find, in the xvi chap. of Exodus, the following: "And it came to pass, that at even the Quails came up, and covered the camp." Again, in the xi chap. of Numbers. "And there went forth a wind from the Lord, and brought Quails from the sea, and let them fall by the camp, as it were a day's journey on this side, and as it were a day's journey on the other side round about the camp, and as it were two cubits high upon the face of the earth. And the people stood up all that day, and all that night, and all the next day, and they gathered the Quails: he that gathered least gathered ten homers: and they spread them all abroad for themselves round about the camp."

RAIL. Rallus aquaticus.

Water Rail. Bewick Br. Birds, ii. t. p. 13.

PROVINCIAL.

Oar-cock.

We have been favoured with the following account from Mr. Holdsworth, which was given to him by a naval officer, and which appears to favour the opinion that the Water-Rail is migratory in some parts of the world, if not in England.

This officer (Mr. Clark) states, that one of these birds was taken on board his Majesty's ship Merlin, on her return from Newfoundland, after flying about the ship for three days; the nearest land at the time was the Western Islands, distant about one hundred and forty leagues; and the ship had then been ten days at sea. This gentleman further remarks, that he was surprised to find the bird in good condition. It ate small

small bits of mutton readily, and in a week would take food from the hand. It was kept alive for some time after their arrival at Portsmouth, but being neglected in the absence of Mr. Clark, it died.

This gentleman speaks with confidence as to the bird being the Water-Rail, as he had shot them frequently both in England and in Portugal, and says it is commonly called Skiddy-cock in Devonshire.

Neither the season of the year, nor the state of the wind or weather is mentioned, but it is well known our ships return from the Newfoundland station in the autumn.

Although this account seems to imply that the bird was on wing for three days and nights, it must not be supposed that it was actually flying all that time; but that it rested on some part of the ship at night, and by that means was seen again in the morning.

It has been remarked to us, that the Rail is vastly more abundant in the marshes of Devonshire in the autumn than at any other time. It should, however, be recollected, that at that season they are in their most multiplied state, so soon after the breeding season, and more particularly noticed by sportsmen at that time, when in pursuit of Snipes.

Similar observations have been made in other parts of England, but which may be attributed to the same causes.

On the European continent it has been esteemed a migratory species, retiring from the northern to the more southern parts in the autumn. Buffon says they pass Malta in the spring and autumn; and that a flight of them were seen at the distance of fifty leagues from the coast of Portugal in the month of April; some of which were so fatigued as to suffer themselves to be taken with the hand.

RAIL-LESSER-SPOTTED-WATER. Vide Gallinule-spotted.

RAIL-SPOTTED.

RAIL-SPOTTED. Vide Gallinule-spotted.

RATCH, ROTCH, or ROTCHIE. Vide Auk-little.

RAVEN. Corvus corax.

Lath. Syn. Sup. ii. p. 106.

Bewick Br. Birds, i. t. p. 68.

Shaw Zool. vii. p. 341.

In the Second Supplement to the General Synopsis, the Grand Corbeau of Levaillant, and the *Corvus Clericus* of M. Sparrman, are said to be only varieties of the Common Raven. We cannot, however, perfectly reconcile the latter to be so, whatever the former may be; especially as it cannot be an accidental variety, since they appear in small flocks about Rosetta in February, where they mix with the flocks of Crows about inhabited places. The habits appear different, independent of the chin being invariably white.

The Raven is the earliest breeder amongst the British birds, frequently beginning a nest before the middle of February. Between this bird and its egg there is a greater disproportion than in any species we have noticed, taking nearly fifty eggs to make the weight of the bird.

It is no uncommon circumstance for these birds to make their nest contiguous to a rookery, and by their continual depredations on the nests of that republic, completely to drive them away. Several such instances have occurred to our knowledge, where the Ravens were observed to rob the Rooks nests of their callow brood, for the purpose of feeding their own young: and it has been long before the colony recovered its usual population.

The *trachea* of the Raven has a singular structure at the lower part. It is represented in the fourth Vol. of the *Berlin Transactions* by Dr. Bloch.

REDBREAST. Sylvia rubecula.

"The Redbreast" says Mr. Fleming, in a letter to the author, "is only occasionally observed in Zetland after gales of wind." Whether in the spring, or autumn, or at what season is not mentioned; but most probably in the autumn, when those which breed in the more northern parts of the European continent, may be shifting their quarters, and by accident driven from Norway.

RED-LEGS. Vide Gull-Red-legged and Sandpiper-purple.

REDSHANK. Scolopax calidris.

Bewick Br. Birds, ii. t. p. 91.

PROVINCIAL.

Sandcock.

This species is amongst the few that now continue to be indigenous, and to breed in our fens. In some part of the fens of Lincolnshire, it is tolerably plentiful in the summer months, particularly about Spalding. It makes a slight nest with coarse grass, upon a tump in the moister parts or most boggy places, and begins to lay early in May. When disturbed is extremely clamorous, flying round the intruder, and making an incessant shrill piping note.

Like other species of a similar nature, we observed that the number of eggs in each nest is invariably four, and those constantly placed with their smaller ends in the centre. The eggs weigh from five drams forty grains, to six drams. The length of the bird is rarely so much as twelve inches, but usually about eleven and a quarter.

The Redshank, although so similar in its habits to the Ruff, will not fatten, nor live long in confinement, as we are assured by the fen-fowlers.

There is a very considerable difference between the old birds in the height of their plumage in the spring, and the young shot in the autumn, or early part of the winter: the latter

latter is described in the former part of this work. The maturely feathered birds are darker on the upper parts, at least the streaks are darker, and are wholly destitute of the grey, or pale spots of any kind: the neck is more streaked, and of a darker colour: the under parts, including the breast, are much spotted, especially along the sides of the body. The female is rather the least, measuring about eleven inches.

The variety in plumage, to which many of the Snipe and Sandpiper classes are subject from age or season, has and will continue to perplex the Ornithologist, especially where he is not able to trace them through the various changes.

REDSTART. Sylvia Phœnicurus.
Bewick Br. Birds, i. t. p. 216.

The Redstart is a local species of warbler, resorting to warm villages, and disposed to reside near the habitations of man: it will even make its nest amongst the buildings of a town. We have long noticed it as far west as nearly the whole extent of Devonshire, in the low and sheltered situations between Exeter and Plymouth; but in the southern hundreds of that county, which extend into a sort of promontory to the British channel, it is a rare occurrence; the nature of the country not being congenial to its habits. The same has been observed in Cornwall; for we are assured by Mr. Stackhouse, that only two instances had occurred to him in a considerable number of years: both these were males and were taken alive.

REED-FAUVETTE. Vide Warbler-sedge.
RIPPOCK or RITTOCK. Vide Tern-common.
RODGE. Vide Gadwall and Merganser Redbreasted.
ROOK. Corvus frugilegus.

Lath.

Lath. Syn. Sup. ii. p. 109.
Bewick Br. Birds, i. t. p. 74.
Shaw Zool. vii. p. 347.

The Rook does not appear to have found its way to the island of Guernsey, although we have noticed Crows and Magpies not unfrequent.

In so numerous a species it is not surprising that varieties should frequently occur with some white feathers, and occasionally wholly white.

If Levaillant is correct as to the species, it is a curious circumstance, that this bird, at the Cape of Good Hope, should not have the nostrils bare of feathers, as is usual in Europe: an evident proof that they have no occasion, in that climate, to search under ground for their sustenance.

The Rook does not deposit the food intended for its young in its craw, and disgorge like the Pigeon or Dove tribe, but is furnished with a small pouch at the root of the tongue, from whence the male ejects the contents of its magazine to feed the female during the incubating season; and both to feed their young. At this season the pouch may be easily observed distended with food, as they come from the field to their nest.

"In the year 1783, (says Mr. Bewick) a pair of Rooks, after an unsuccessful attempt to establish themselves in a rookery, at no great distance from the Exchange, in Newcastle, were compelled to abandon the attempt. They took refuge on the spire of that building, and although constantly interrupted by other Rooks, built their nest on the top of the vane, and brought forth their young, undisturbed by the noise of the populace below them: the nest and its inhabitants turning about with every change of the wind. They returned and built their nest every year on the same place, till 1793, soon after which the spire was taken down."

This circumstance has by some mistake been ascribed to the Crow

Crow as well as the Rook, as we have noticed in another place. The fact is that both species are frequently called Crows, being confounded. It is, however, most likely to have been the Rook; however, be this as it may, we are told that a small copper-plate was engraven, with a representation of the circumstance of the size of a watch-paper; and that as many of them were sold as produced to the engraver the sum of ten pounds.

ROUTHERCOCK. Vide Goose-bernacle.

RUFF. Tringa pugnax.

Bewick Br. Birds, ii. t. p. 95.
Yellow-legged-Sandpiper, Orn. Dict. App.
Tringa Grenovicensis, Ind. Orn. ii. p. 731.
Greenwich Sandpiper, Lath. Syn. Sup. p. 249.
Tringa Equestris, Ind. Orn. ii. p. 730?
Equestrian Sandpiper, Lath. Syn. Sup. ii. p. 311?
Le Chevalier Commun, Buf. vii. p. 511.—Pla. Enl. 844?
Tringa Gambetta. Ind. Orn. ii. p. 728?
Gambet Sandpiper, Br. Zool. ii. No. 198. t. 70?
Ruff, Rural Sports, ii. t. p. 458.

The very great diversity in the plumage of the Ruff, as well in the winter as in the summer, has occasioned its being multiplied into so many species, that it will be long before the whole of the synonyms can be collected.

In this place we have only referred to four species, two of which we are perfectly clear about, namely the Yellow-legged-Sandpiper, and the Greenwich Sandpiper: of the other two we cannot speak positively, but have scarcely a doubt but they are of this species. Of the two first we can speak to fact, not only because we have had Ruffs alive in the plumage exactly similar after the ruff has been cast, but that the original Greenwich Sandpiper, from which the description was taken, is now in our possession.

So much have these birds puzzled the scientific naturalist, that it is utterly impossible to say how far it has been multiplied into distinct species. Many we have received for non-descript Sandpipers; in particular one from Sandwich, in Kent, and another lately, which was shot near Exeter, destitute of the usual character, the long feathers denominated the ruff.

It should be remarked, that these long feathers are of short duration, and that before the Ruffs depart from us in the autumn, they are completely destitute of such a character both old and young; and yet retain such a variety and dissimilitude of plumage, that where the more prominent characters are not known, confusion ensues, and as many new species will in time be made, as the unlimited dissimilarity of plumage will admit. To obviate therefore as much as possible this difficulty, we shall point out some marks of distinction, which long observation on the changes of these birds in confinement enables us to do; and we presume to assert, that by such experience we have no difficulty in discriminating this species at any season.

The first object to be considered is the length, which is between twelve and thirteen inches, to the end of the tail; and, in the plumage, the tail and its coverts, and the smaller coverts of the wings, are to be particularly attended to. In the former, the two middle feathers are usually barred like their coverts, the rest pale cinereous-brown, darkest near their points; the side coverts, as well as the under coverts of the tail, are invariably white. In younger birds, there is sometimes not above one bar on the middle feathers of the tail, and the colour of the rest is more brown, dashed with ash-colour. Neither the colour of the bill, nor the legs, is to be depended upon; the former is of all shades, from dusky to a pale dull yellow, and black at the point; and the latter is sometimes of a dingy-green. Others have their legs

flesh-colour,

flesh-colour, or pale dull-yellow. The colour of the bill and legs depends entirely on the plumage; those with dark feathers predominating, have the darkest bill and legs, and vice versa. The shape of the bill is a much better mark of distinction, the point being a trifle compressed and spreading. An attention to these characters will be the means of discrimination at those seasons when the character that gave rise to the name is not apparent. The pimples on the face of the Ruff are only observable in the breeding season, and not then do the younger males, which are destitute of the ruff, possess such a mark; nor do those in confinement ever lose the feathers on the face, which in the wild state fall off, and are supplied by a papillous skin, on the front half of the head in some old birds: but the ruff and auricles are annually produced in as high perfection as on those birds in a state of nature. From this circumstance it is evident, that the bare papillous head is only attendant on venery.

Without doubt this species leaves this country in the autumn, with a few exceptions, one of which occurred on the 27th of December, 1808: it was shot near Slapton, on the south coast of Devon, and presented to us by Mr. Holdsworth. Between this specimen, and that which has been described for the Greenwich Sandpiper, there is only a trifling difference.

The author of *Rural Sports* remarks that "if observers had not assured us that these birds came from the north, we might draw the opposite inference, that they arrive from the south: it may therefore be premised, (adds this author) that it is the case with these as with the Woodcocks, which are said to come from the east, and return to the west or south, but which in some countries only descend from the mountains to the plains, and again return to the heights. It is even probable, (continues this writer) that the Ruffs remain in the same country, only shifting to different parts of

it as the season changes, or perhaps may pass unobserved, intermixed with the dusky Sandpipers, or the Horsemen, to which they have great analogy, after moulting in June."

There requires no more argument in support of an opinion, that these birds come from the south to visit us, and other northern latitudes in the breeding season, and return again south to winter; than, that from whatever quarter the Woodcocks come in their annual migration, by the same route do they return, and not in an opposite direction. There can be no doubt, that all migrative birds who come to us in the breeding season, come from more northern latitudes; those migrating species which are found to inhabit this island and similar latitudes in winter, retire more north to perform the great dictates of nature. We may be assured the Ruff is no more to be met with in such latitudes as England, during the winter months, than the Woodcock is in the summer; for we must conclude such phænomenon as an accidental appearance of either out of their respective seasons, to be occasioned by defect, or indisposition in the usual migrative months.

Latitudinal influence is the sole cause of such periodical flights, not longitudinal; no birds bend their course, east or west, however they may veer a little by instinct to avoid difficulties, or may be driven by tempests out of their natural course.

The Ruff visits much higher latitudes on the Continent, in the nidificating season, than any part of England: it breeds in the swamps of Lapland and Siberia, but perhaps does not find its way so far westward as Iceland; nor have we heard of it so far in that direction as our neighbouring and sister kingdom Ireland. At present, the few, comparatively speaking, that visit Great Britain, confine themselves in the breeding season to the eastern parts, where the only extensive fens remain that are congenial to their habits:

we

we are, however assured, on the authority of a very old sportsman, that they were not uncommon in the fens about Bridgewater, in Somersetshire, before they were drained and enclosed.

In a tour through Lincolnshire, we took every means in our power to become intimately acquainted with all the history of this singular species that could be obtained. We found that they were become much more scarce than they were before a large tract of the fens were drained and enclosed; and will, as agriculture increases, be entirely driven from the island.

A few Ruffs are still found about Crowland, but the north fen near Spalding, and the east and west fens between Boston and Spilsby, are the only parts that appear to produce them with certainty, but by no means plentiful.

The trade of catching Ruffs is confined to a very few persons, which at present scarcely repays their trouble, and expence of nets. These people live in obscure places on the verge of the fens, and are found out with difficulty, for few, if any birds, are ever bought, but by those who make a trade of fatting them for the table; and they sedulously conceal the abode of the fowlers; so much, that by no art could we obtain from any of them where they resided; and in order to deceive us after evading our intreaties, gave us instructions that led us quite a contrary direction. The reason of all this was obvious, for after much labour and search, in the most obscure places, (for neither the innkeepers, nor other inhabitants of the towns, could give any information, and many did not know such a bird was peculiar to their fens) we found out a very civil and intelligent fowler, who resided close to Spalding, at Fen-gate, by name, William Burton, (we feel a pleasure in recording his name, not only from his obliging nature, but for the use of others in similar pursuits) and strange to say,

that

that although this man had constantly sold Ruffs to Mr. Towns, a noted feeder, hereafter more particularly noticed, as also to another feeder, at Cowbit, by the name of Weeks, neither of those persons could be induced to inform us even of the name of this fowler. The reason, however, was evident, and justly remarked by Burton, for he obtained no more than ten shillings per dozen, whereas Weeks demanded thirty shillings for the like number he had the same day bought of Burton. The season was far advanced, and we were obliged to buy some at that price of Weeks, for Burton could not then catch us as many as were required.

At this time we were shewn into a room, where there were about seven dozen males and a dozen females, and of the former there were not two alike. This intrusion to choose our birds, drove them from their stands, and compelling some to tresspass upon the premises of others, produced many battles.

By this feeder we learned, that two guineas a dozen was now the price for fattened Ruffs; and he never remembered the price under thirty shillings, when fit for table.

Mr. Towns, the noted feeder at Spalding, assured us his family had been a hundred years in the trade; boasted that they had served George the 2d and many noble families in the kingdom. He undertook, at the desire of the late Marquis of Townsend, (when that nobleman was Lord Lieuterant of Ireland) to take some Ruffs to that country, and actually set off, with twenty-seven dozen from Lincolnshire, left seven dozen at the Duke of Devonshire's, at Chatsworth, continued his route across the kingdom, to Holyhead, and delivered seventeen dozen alive in Dublin, having lost only three dozen in so long a journey, confined and greatly crowded as they were in baskets, which were carried upon two horses.

Nothing can more strongly evince the hardy constitution of these birds, than the performance of such a journey, so

soon

soon after capture, and necessarily fed with a food wholly new to them: and yet a certain degree of care and attention is requisite to preserve, and more especially to fatten them; for out of the seventeen dozen delivered at the castle of Dublin, not more than two dozen were served up to table, doubtless entirely owing to a want of knowledge, or attention of the feeder, under whose care they had been placed.

Few Ruffs, comparatively speaking, are now taken in the spring, as the old birds frequently pine, and will not readily fatten. The principal time is in September, when the young birds are fled; these are infinitely more delicate for the table, more readily submit to confinement, and are less inclined to fight. If this plan was generally enforced by the proprietors of fen land, or made a bye-law amongst themselves, the breed would not be so reduced; but there are still some fowlers who make two seasons, and thus by catching the old birds in the spring, especially the females, verify the fable of the Goose and the golden eggs; the destruction of every female in the breeding season, is the probable loss of four young.

The manner of taking these birds is somewhat different in the two seasons; in the spring the Ruffs *hill*, as it is termed, that is, they assemble upon a rising spot of ground, contiguous to where the Reeves propose to deposit their eggs; there they take their stand, at a small distance from each other, and contend for the females; the nature of polygamous birds. This hill, or place of resort for love and battle, is sought for by the fowler, who, from habit, discovers it by the birds having trodden the turf somewhat bare, though not in a circle as usually described.

When a hill has been discovered, the fowler repairs to the spot before the break of day, spreads his net, places his decoy birds, and takes his stand at the distance of about 140 yards, or more, according to the shyness of the birds.

The net is what is termed a single clap-net, about 17 feet

in

in length, and 6 wide, with a pole at each end; this by means of uprights fixed in the ground, and each furnished with a pulley, is easily pulled over the birds within reach, and rarely fails taking all within its grasp; but in order to give the pull the greatest velocity, the net is (if circumstances will permit) placed so as to fold over with the wind: however, there are some fowlers, who prefer pulling it against the wind for Plovers. As the Ruffs feed chiefly by night, they repair to their frequented hill at the dawn of day, nearly all at the same time, and the fowler makes his first pull according to circumstances, takes out his birds, and prepares for the stragglers who traverse the fens, and who have no adopted hill; these are caught singly, being enticed by the stuffed birds.

Burton, who was before mentioned, never used any thing but stuffed skins, executed in a very rude manner; but some fowlers keep the first Ruffs they catch for decoy birds, these have a string of about two feet long tied above the knee, and fastened down to the ground.

The stuffed skins are sometimes so managed as to be moveable by means of a long string, so that a jerk represents a jump, (a motion very common amongst Ruffs, who at the sight of a wanderer flying by, will leap or flirt a yard off the ground) by that means inducing those on wing to come and alight by him.

The stuffed birds are prepared by filling the skin with a whisp of straw tied together, the legs having been first cut off, and the skin afterwards sewed along the breast and belly, but with no great attention to cover the straw beneath: into this straw a stick is thrust, to fix it into the ground, and a peg is also thrust through the top of the head, and down the neck into the stuffing or straw body, and the wings are closed by the same process.

Rough as this preparation is, and as unlike a living bird as skin

skin and feathers can be made, it answers all the purpose.

When the Reeves begin to lay, both those and the Ruffs are least shy, and so easily caught, that a fowler assured us he could with certainty take every bird on the fen in the season. The females continue this boldness, and their temerity increases as they become broody; on the contrary, we found the males at that time could not be approached within the distance of musket shot, and consequently far beyond the reach of small shot.

We were astonished to observe the property that these fowlers have acquired, of distinguishing so small an object as a Ruff at such an immense distance, which amongst a number of tufts or tumps, could not by us be distinguished from one of those inequalities; but their eyes had been in long practice of looking for the one object.

The autumnal catching is usually about Michaelmas, at which time few old males are taken, from which an opinion has been formed that they migrate before the females and young. It is, however, more probable that the few which are left after the spring fowling, like other polygamous birds, keep in parties separate from the female and her brood till the return of spring. That some old Ruffs are occasionally taken in the autumnal fowling, we have the assertion of experienced fowlers, but we must admit that others declare none are taken at this season. It must, however, be recollected, that in the autumn, the characteristic long feathers have been discharged, and consequently young and old males have equally their plain dress: but the person who assured us that old male birds were sometimes taken at that season, declared it was easy to distinguish them from the young of that summer.

It does not appear to be the opinion of fowlers, that the males are more than one season arriving at maturity, because the Ruffs taken in the spring, destitute of the characteristic

characteristic long feathers, which constitutes their principal distinction, are comparatively few to those possessing the ruff: the opinion therefore, that those ruffless males are birds of a very late brood of the preceding season, is a reasonable conjecture.

The long feathers on the neck and sides of the head, in the male, that constitute the ruff and auricles, are of short duration, for they are scarcely completed in the month of May, and begin to fall the latter end of June. The change of these singular parts is accompanied by a complete change of plumage; the stronger colours, such as purple, chesnut, and some others, vanish at the same time, so that in their winter dress they become more generally alike from being less varied in plumage; but we observed that those who had the ruff more or less white, retained that colour about the neck after the summer or autumnal moulting was effected.

The females, or Reeves, begin laying their eggs the first or second week in May; and we have found their nest with young as early as the third of June. By this time the males cease to *hill*.

The nest is usually formed upon a tump in the most swampy places, surrounded by coarse grass, of which it is also formed.

The eggs are (as usual with its congeners) four in number; these are so nearly similar in colour to those of the Snipe, and Redshank, both of which breed in the same wet places, and make similar nests, that some experience is required to discriminate them: they are, however, superior in size to the former, and are known from the latter by the ground being of a greenish hue instead of rufous white; but individuals assimilate so nearly to each other as not to be distinguished, especially as the dusky, and brown spots and blotches are similar. The weight of the eggs is from five drams twenty grains, to five drams fifty grains.

The

The weight of the Ruffs in the spring, when first taken, is from five ounces three-quarters, to six ounces and a quarter: the weight of the Reeves about four ounces. The length of an old Ruff is sometimes as much as thirteen inches and a half: young males about twelve inches. The female measures about ten inches.

It is a remarkable character of these birds, that they feed most greedily the moment they are taken: a basin of bread and milk, or boiled wheat, placed before them, is instantly contended for, and so pugnaceous is their disposition, that they would starve in the midst of plenty, if several dishes of food were not placed amongst them, at a distance from each other.

We took the trouble of carrying several of these birds with us from Lincolnshire into Devonshire, in hopes of keeping them for several years, in spite of the opinion of Mr. Towns, that they could not be kept alive through the winter. These beautiful little partners in our carriage, were taken out of their basket twice a day, and put into a corner of the room wherever we stopped for refreshment, and with a few chairs and a piece of canvass hung over them, reaching the ground, they were perfectly contented, and appeared as happy as fighting and eating could make them: and in such a situation they passed each night on the journey. The last of these birds lived in confinement four years, and several for two and three years, which gave us an opportunity to observe more minutely their manners and change of plumage: and we noticed that their annual changes never varied; every spring produced the same coloured ruff and other feathers; but the tubercles on the face never appeared in confinement.

A young male that was taken destitute of a ruff in the breeding season, whose plumage was mostly cinereous, except about the neck and head, put on the ruff in confinement the next spring for the first time, which was large, and the feathers were

were a mixture of white and chesnut: the scapulars and breast also marked with chesnut; and in the succeeding autumnal moulting he re-assumed his former cinereous plumage.

On the 17th of May, 1806, a Ruff was shot at the mouth of the Avon, on the coast of south Devon; this had a white ruff quite perfect, but no warty appearance about the face; another proof, that like the swelling in the neck of the Stag, these tubercles are the consequence of either sexual desire, or actual connexion.

We had occasion to remark, that although the pugnacious disposition of the Ruff never entirely ceased in confinement, yet it increased with the growth of the long neck feathers in the spring, when the least movement of either from their usual stand, provoked a battle. At other times they would occasionally sleep close to each other, with their heads turned over the wing, and one leg tucked up: but a mess of bread and milk instantly roused the latent spirit for battle; and one bird was so much wounded in the throat in one of these feuds that he died. Their actions in fighting are very similar to those of the game Cock: the head is lowered, and the bill held in a horizontal direction; the ruff, and indeed every feather, more or less distended, the former sweeping the ground as a shield to defend the more tender parts; the auricles erected, and the tail partly spread; upon the whole assuming a most ferocious aspect. When either could obtain a firm hold with the bill, a leap succeeded, accompanied with a stroke of the wing; but they rarely injured each other.

In confinement they paid no attention to the Reeves, except to drive them from their food; and never attempted to dispute with any other species, but would feed out of the same dish with Land Rails, and other birds confined with them, in perfect amity.

SAND COCK. Vide Redshank. SANDERLING.

SANDERLING. Charadrius calidris.
Lin. Trans. viii. p. 268.
Lath. Syn. Sup. ii. p. 315.
Bewick Br. Birds, ii. t. p. 1.

Said to be found in New South Wales, and there called by the natives Waddergal. Mr. Simmonds (in the *Transactions* of the *Linnean Society*) remarks, that he observed this species on the second of June at the Mull of Cantire.

SANDPIPER-ASH-COLOURED. Orn. Dict.

We have noticed under the article Knot, that these two birds are of the same species, and that the Ash-coloured Sandpiper (described in the former part of this work) is the same bird in its mature plumage, and what has generally been considered as the Knot. We have, therefore to express a wish, that the name of Knot should be retained, and that of Ash-coloured Sandpiper be expunged, as a distinct species, by connecting its synonyms with those of the former, being in fact only that species in its young or autumnal plumage; known by the semi-circular black and whitish lines on the back, scapulars, and coverts of the wings.

SANDPIPER-BLACK. Tringa Lincolniensis.

We cannot avoid suspecting that this is really an immatured Purple Sandpiper.

SANDPIPER-BROWN. Tringa fusca.

A variety of the Little Sandpiper, which corresponds so nearly with the description of the Brown Sandpiper, having come into our possession, induces us to suspect that the *Tringa fusca*, is only an immatured specimen of *Tringa pucilla*. Vide Sandpiper-little.

SANDPIPER-

SANDPIPER-EQUESTRIAN. Tringa equestris.

We have long considered the *Tringa equestris* as only a variety of *Tringa pugnax*, and we are the more confirmed in this opinion, by the description of a recent specimen, from Sandwich, in Kent, where in 1802, five are said to have been shot.

The description given by Dr. Latham, in his Supplement to the *General Synopsis*, is as follows:

"Length twelve inches: bill dusky: legs pale grey: the body above rufous-grey, clouded with brown: sides of the head, fore-part of the neck, and breast white, clouded with pale brown; on the sides of the head are minute specks of the same: chin, belly, thighs, vent, and rump, white; the two middle tail-feathers rufous-brown, with black bands; the others plain pale rufous-brown.

Those who will take the trouble to compare this description with our distinguishing characters of the Ruff, when destitute of the long neck feathers, will, we have little doubt, join us in placing the synonyms of the Equestrian Sandpiper with those of the Ruff.—Vide that bird.

SANDPIPER-GREEN. Tringa Ochropus.

Tringa Ochropus. Lin. Syst. i. p. 250.
Lath. Syn. Sup. ii. p. 311.
Bewick Br. Birds, ii. t. p. 100.
Tringa littorea. Lin. Syst. i. p. 251.
Gmel. Syst. i. p. 677.
Ind. Orn. ii. p. 731.
Shore Sandpiper. Arct. Zool. ii. p. 481, F.
Lath. Syn. v. p. 171.

Doctor Latham, in his last work above referred to, has brought the *Tringa Ochropus* and *glarivla* together as one species. It is true all the accounts of the Wood Sandpiper are

GREEN SANDPIPER, Var.

are so imperfect, that at best it must be a matter of opinion whether the original bird, described first by Linnæus was a distinct species, or only a variety of the Green Sandpiper.

With a bird before us essentially differing from the *Ochropus*, and equally answering the Linnæan specific characters, we are induced to consider it as the true *glareola*, especially as it could not find a place so appropriate; and therefore with a full allowance of credit to the Linnæan species, rather than make an additional one in a class already too much multiplied, and extremely intricate, we gave it in the former part of this work.

At the time our friend published his last Supplement he had not seen our description of what we take to be the Wood-Sandpiper, nor have we seen any thing to induce us to change our opinion. Thus, at least, our Green and Wood Sandpipers being perfectly distinct species are submitted as such to the critical Ornithologist.

Like most of this tribe, the markings in the old and in the young birds, are very different in the Green Sandpiper; the former has been described in the original work; the following is that of a specimen shot on the seventeenth of August. This has the coverts of the wings and tertials spotted, as well as the back and scapulars; those on the tertials are along the margins only, and the spots are not white but pale brown: the neck is less streaked than in adults: the tail also differs in having the outer feather quite white; the second with a very small spot on the outer web; the third with two small spots on the outer and one on the inner web: the rest more or less barred, increasing to the middle ones, which have four broad bars of black. The under scapulars have the same V-like markings as in the adult.

The general colour of the bird above is a dusky-brown, glossed with green: from the upper mandible is a dusky streak to the eye; above which is one of white, that partly

passes over the eye; and the eye-lids are also white: the legs and feet like the adult; the outer toe is equally united to the middle one at the base by a membrane.

This last is the *Tringa littorea* of *Linnæus*, which Dr. Latham had judiciously given in his former works as a variety of *Ochropus*, and we cannot conceive why he changed that opinion in his *Index Ornithologicus*.

SANDPIPER-GREENWICH.

The bird from which the original description was taken, and entitled as above, is now before us, and we have no hesitation in pronouncing it to be a variety of the Ruff, *Tringa pugnax*, in its winter plumage. Vide Ruff.

SANDPIPER-GREY. Tringa squatarola.

Tringa squatarola, Lin. Syst. i. p. 252.
Tringa helvetica, Lin. Syst. i. p. 250 ?
Gmel. Syst. i. p. 676.—Ind. Orn. ii. p. 728 ?
Phil. Trans. lxii. p. 412 ?
Vanneau de Suisse, Buf. viii. p. 60.—Pla. Ent. 853 ?
Vanellus helveticus, Bris. v. p. 106. t. 10. p. i.—Id. 8 vo. ii. p. 239 ?
Swiss Sandpiper, Arct. Zool. ii. No. 396 ?
Lath Syn. v. p. 167.—Id. Sup. p. 248 ?

This appears to be another of the genus, whose change of plumage at different seasons has occasioned two distinct species to be formed from it: the *tringa squatarola* is the winter plumage of the Grey Sandpiper, and *Tringa helvetica*, we have very little doubt, is the same bird in its breeding plumage.

It should be recollected, that the Golden Plover produces a clear exemplification by a similar change, the under parts becoming more or less black in the spring. By comparing, therefore,

therefore, the descriptions of different authors, we find so little difference between those two birds, except in the black feathers beneath, that we think very little doubt remains on the subject: and what may be urged as the strongest evidence in support of such an opinion is, the permanent black under scapulars, and minute back toe, which are similar in both: the latter a most singular character.

With us the variety denominated the Swiss Sandpiper may never have occurred, for the Grey Sandpiper is rather a rare species, and as it leaves us early in the spring to breed in the more northern regions, it does not probably indicate the change in plumage, previous to its departure. Possibly it may breed in the alpine parts of Switzerland, and thus may have been noticed in its breeding plumage.

We shall now transcribe the very judicious remarks made by Dr. Latham, in his first Supplement to the *General Synopsis*, in order that the British Ornithologist may identify the bird, should such occur to him.

Of the Swiss Sandpiper, the Doctor says, "One of these from Hudson's Bay, given to me as the female of this species, had the upper parts brown, mottled with dusky-white, not unlike the male, but less bright: sides of the head and fore-part of the neck white, sparingly marked with brown spots: belly white, marked with longish streaks of black; the ends of the feathers being black for some length; the quills, rump, and tail, as in the male: in both, the sides of the body have several black feathers above two inches in length, arising at the junction of the wing (the under scapulars). In both, the bill and legs are black, and a spur serves instead of a hind toe. In short, this reputed female is so like the Grey Sandpiper, that the belly excepted, which in the English one is not marked with black, one must suppose them to be mere varieties of each other."

Of the Grey Sandpiper the Doctor says, "In the roof of

the mouth of this bird, is a double row of spinous appendages, pointing inwards: tongue the length of the bill: under the wing the same long black feathers, eight or nine in number, as observed above of the Swiss Sandpiper: and no back toe only a spur, such as in the Petrel."

With such information, and with the knowledge that the Golden Plover does at times assume the black plumage beneath, we are at a loss to guess why our friend should have hesitated in bringing these birds together in his *Index*; for in our opinion there can scarcely be the shadow of a doubt.

SANDPIPER-LITTLE. Tringa pusilla.

Little Stint or Least Snipe, Bewick Br. Birds, ii. t. p. 122.

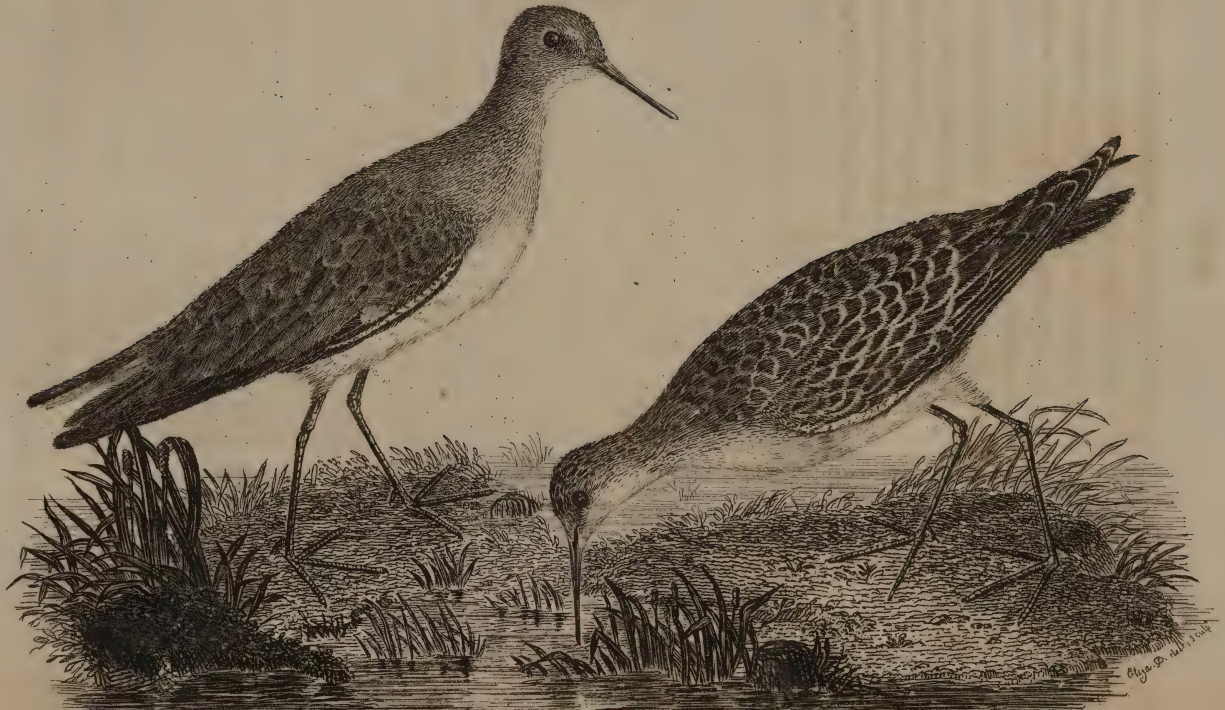
Brown Sandpiper, Br. Zool. ii. No. 195 ?

We cannot help suspecting that this has met with the same fate as most of its congeners, by being multiplied into at least two species, since in some of its changes in plumage, it so nearly accords with the Brown Sandpiper of Mr. Pennant, as may fairly warrant a supposition that they are of the same species, as a recent specimen now before us will go near to prove.

The length and weight nearly the same as that described in the Appendix to the *Ornithological Dictionary*. Bill and irides the same: the forehead and cheeks round the eyes very pale, nearly white: throat and all beneath white, except across the breast, where it is mixed with light brown; the crown of the head, back, scapulars, and coverts of the wings, dusky-black, more or less margined with pale rufous, but in some of the scapulars the margins are nearly white. These marginated feathers give the bird a spotted appearance. The back of the neck brown, mixed with cinereous: quills like those of the other: the middle feathers of the tail are like the tertials, dusky, bordered with ferruginous, the others cinereous, palest on the margins: legs dusky.

This

Little Sandpiper



This is without doubt the *Tringa pucilla* in its nestling feathers, or plumage prior to its first moulting.

Six of these birds were observed by Mr. Anstice in Sept. 1805, at the mouth of the Bry, near Bridgewater, four of which he shot, but was unable to obtain more than one, (on account of the softness of the mud) and that has been kindly added to our collection. The other two were afterwards seen but could not be procured.

The specimen here described, very nearly corresponds with that given by Mr. Bewick, except, that in his bird the tail is said to be dusky; but as each feather is not defined, perhaps the middle feathers only were dusky, appearing of that colour when closed.

Mr. Pennant's bird seems to have been of the same colour as ours, but by the description, differently disposed on each feather, viz. brown edged with black, and pale rufous. Mr. Bewick's bird is marked above, black with white on the exterior, and rust colour on the interior webs of each feather. All these little variations may easily be conceived, knowing that season and age have great influence on the plumage of some birds; and a little allowance may be admitted for the different manners in which different authors are observed to describe the same thing; as well as the very vague definition of colours.

In most young birds that differ at first from their parents, we perceive they are more or less spotted or mottled; and amongst the Sandpipers this is the common primary appearance. The young of the Dunlin, the Purre, the Knot, the Green Sandpiper, & others, are more spotted than the adults; thus the perfect state of the Little Sandpiper is, we perceive, of a plain cinereous-brown colour, with only dusky shafts, as described in the Appendix to the former part of this work.

SANDPIPER-PIGMY. Vide Curlew-pigmy.

SANDPIPER-PURPLE. Tringa nigricans.

Tringa nigricans, Lin. Trans. iv. p. 40. t. 2.
Selninger Sandpiper, Lath. Syn. Sup. ii. p. 312.
Tringa Striata, Gmel. Syst. i. p. 672.
Ind. Orn. ii. p. 733.
Totanus Striatus Bris. v. p. 196-5.-Id. 8vo. 11. p. 263.
Le Chevalier rayé, Buf. vii. p. 516.
Striated Sandpiper, Arct. Zool. 11. No. 383.
Lath. Syn. v. p. 176.

When the above synonyms have been added to those already given with the Purple Sandpiper, in the former part of this work, it will clearly evince the necessity of more than ordinary attention in the discrimination of the species of this genus. Here are four supposed species brought into one, and if the Black Sandpiper of the *British Zoology* was added as a trifling variety, we suspect we should not be far from correct.

In the latter end of November, 1807, Mr. Anstice favoured us with two specimens of the Purple Sandpiper, that were shot in Somersetshire, and bought in the market of Bridgewater. These, upon dissection, proved to be of different sexes: the male is the least, weighing only two ounces one dram; the female two ounces and a half. The male is rather darker in colour, but in no other respect differing from the other sex; nor are they materially different from the one originally described.

In both these specimens the upper part of the breast is dusky grey; the sides of the breast near the shoulder black: the legs dull orange: the upper part of the bill towards the base orange, paler at the base of the under mandible.

In the gizzards of these birds were fragments of small *Cancri*, *Onisci* and shells, with several perfect fry of *Turbo littoreus*.

SANDPIPER-RED-LEGGED.

Bewick Br. Birds, ii. t. p. 113.

Mr.

Mr. Bewick, in his ingenious work on British birds, has figured and described a species of Sandpiper with which we are at present unacquainted; but we cannot agree with him, that it is *Tringa erythropus*, from which it differs so essentially in colour, in size, and particularly in the tail, and consequently ought not to bear the above title of Red-legged Sandpiper, the English name adopted in the *General Synopsis* for the *erythropus*. For the present, however, until this bird is better known, we suffer it to remain with this title, as we are unable to do more than transcribe what the author has said of it.

"This bird measures from the tip of the beak to the end of the tail, ten inches: the bill is an inch and three-eighths long, black at the tip, and reddish towards the base: the crown of the head is spotted with dark brown, disposed in streaks, and edged with pale brown and grey: a darkish patch covers the space between the corners of the mouth and the eyes: the chin is white; the brow and cheeks pale-brown, prettily freckled with small dark spots: the hinder part of the neck is composed of a mixture of pale-brown, grey, and ash, with a few indistinct dusky spots; the fore-part, and the breast are white, clouded with dull cinnamon-colour, and sparingly and irregularly marked with black spots reflecting a purple gloss: the shoulder and scapular feathers are black, edged with pale rust colour, and have the same glossy reflections as those on the breast: the tertials are nearly of the same length as the quills, and are marked like the first annexed figure: (barred) the ridges of the wings are brownish ash-colour: the coverts, back, and rump, are nearly the same, but inclining to olive, and the middle of each feather is of a deeper dusky-brown: the primary quills are deep olive brown: the exterior webs of the secondaries are also of that colour, but lighter, edged and tipped, and the inner webs are mostly white towards the base: the tail-coverts are glossy black, edged

edged with pale rust-colour, and tipped with white; but in some of them a streak of white passes from the middle upwards, nearly the whole length. The tail feathers are lightish brown, except the two middle ones, which are barred with spots of a darker hue: the belly and vent are white: legs bare above the knees, and red as sealing-wax: claws black."

"The female is less than the male, and her plumage more dingy and indistinct: an egg taken out of her previous to stuffing, was surprisingly large considering her bulk, being about the size of that of a magpie, of a greenish white colour, spotted and blotched with brown, of a long shape, and pointed at the smaller end."

"The foregoing figure and description were taken from a pair, male and female, which was shot on Rippengale fen, in Lincolnshire, on the 14th of May, 1799, by Major Charles Dilke, of the Warwickshire Cavalry, who also obligingly pointed out several leading features of these birds, in which they differ materially from the *Scolopax calidris* of *Linnæus*, called here the Red-shank or Pool-snipe. He says this bird is a constant inhabitant of the fens, and is known to sportsmen by its singular notes, which are very loud and melodious, and are heard even when the bird is beyond the reach of sight.

It is somewhat singular, that a bird, apparently common, and indigenous to the fens, should so long have escaped notice, or at least discrimination, for it must undoubtedly have been confounded with the Red-shank: indeed in many respects it seems to resemble the immatured bird of that species, but differs essentially in the feathers of the tail. We are not informed of the weight of the Red-legged Sandpiper, but the measurement is less than a full grown Red-shank, by an inch or rather more.

SANDPIPER-SELNINGER. Vide Sandpiper-purple.

SANDPIPER-

WOOD SANDPIPER

SANDPIPER-SHORE. Vide Sandpiper-green.
SANDPIPER-STRIATED. Vide Sandpiper-purple.
SANDPIPER-SPOTTED. Tringa macularia.
Bewick Br. Birds, ii. t. p. 111.

This is amongst the few British Sandpipers we have not been fortunate enough to have met with: but as Mr. Bewick has given the figure of one that was shot in the month of August, on the moors near Bellingham, in Northumberland, the description of which is more full than what appears in the former part of this work, we shall take the liberty to transcribe it. Length eight inches.

"The bill is black at the tip, and fades into a reddish colour towards the base: a white streak is extended over each eye, and a brownish patch between them and the bill: the whole upper part of the plumage is of a glossy lightish brown, with green reflections: the head and neck are marked with longish small dark spots; on the back, scapulars, and wing coverts, the spots are larger and of a triangular shape: the rump is plain: the greater quills are dusky; secondaries tipped with white; as are also the greater and lesser coverts, which form two oblique white lines across the extended wings: the two middle feathers of the tail are greenish-brown; the side ones white, crossed with dusky lines: the breast, belly, and vent, are white, but in the female, spotted with brown: legs of a dirty flesh-colour."

SANDPIPER-SWISS. Vide Sandpiper-grey.
SANDPIPER-WOOD. Tringa glareola.

It will be observed under the article of Sandpiper-green, that we remark the very great difficulty under which Ornithologists labour with respect to identifying some of the Linnœan species; and that notwithstanding such good authority as that of Dr. Latham, for connecting the Linnean

Tringa

Tringa glareola and *Tringa Ochropus*, we are inclined to consider that species which we described in the former part of this work to be the true *glareola*, (being equally probable) especially as we cannot assign it any other place. Vide Sandpiper-green and Wood.

In order that we may convey every possible information on so rare, so elegant, and so interesting a species, and that it may not in future be confounded with the Green Sandpiper, a figure is annexed.

SCALE-DRAKE. Vide Shieldrake.

SCARFE. Vide Shag.

SCAURIE or SCOREY. Vide Gull-Herring and Tarrock.

SCOBBY. Vide Finch-chaf.

SCOLDER. Vide Oyster-catcher.

SCOTER. Anas nigra.

Bewick Br. Birds, t. p. 325.

White-throated-Duck, Br. Zool. t. 98.

Will. Orn. p. 367.

The bill of the Scoter is remarkably compressed, and is destitute of that part usual to most of the genus termed the nail.

The *branchi* or divarications of the *trachea* in the male, are larger in diameter than any part of the windpipe; these suddenly decrease from a shoulder near their union with the lungs, and their interior sides are more membranaceous, which contracting, forms a longitudinal sulcus in each.

A female now before us weighed thirty-three ounces; length nineteen inches. Bill wholly black, and destitute of the knob, but along each side of the upper mandible is a slightly crenated groove, as in the male. The crown of the head and whole upper parts of the body, including the wings and tail, are dusky-brown, with an olivacious tinge in some particular

points

points of view: the chin, cheeks, throat, and sides of the upper part of the neck, sullied white, freckled with brown; the large bed of white is divided by a brown list, running down the back of the neck: the scapulars are slightly tipped with cinereous: the whole under parts are mottled with dirty white and brown, the points of the feathers being of the former colour: the tail, in shape, like that of the male: the fore part of the legs and the toes, dull olivaceous yellow; the hind part and webs dusky.

Upon dissection there was no enlargement of the *branchiæ* in this sex. The gizzard was remarkably large, muscular, and strong, for the purpose of triturating the stronger shells, the animals of which are its principal food; in this we observed many large fragments of that species of thick Testacea, called *Mactra solida*.

In Willughby a variety of the female is described, which had the neck and head, on both sides, as far as the eyes, white. Another variety of this sex is figured in the *British Zoology*, plate 98, which is intitled the White-throated-Duck, but has no corresponding description.

These birds might be caught with as much ease, and perhaps in as great abundance on some parts of the British coast as they are said to be in France; where, as Buffon informs us, they are attracted by a small bivalve shell-fish called *Vaimeaux*, which abound on the northern coast of that country. In a religious point of view, these birds are not esteemed flesh, but fish, and consequently are in great request to vary the repast on a fast-day in a Roman Catholic country. Such a stimulus would soon supply our markets with them, but being equally rejected by the poor as well as the rich, on account of their fishy flavour, which in France stamps their value, no arts are in practice with us to capture them: some, however, are accidentally taken in the fishermen's nets. Mr. Anstice informs us that the Scoter is occasionally taken

in

in the river Bry or Brue (which runs through Bridgewater, in Somersetshire, and disembogues in the Bristol channel) in winter; but much more commonly in the moulting season, having cast so many feathers of their wings, as to render them incapable of flight; in this state they frequently get within the nets in shallow water, are surrounded at the ebbing tides and cannot escape.

The loss of so many quill feathers as to render the wings incapable of performing that office nature intended, is wholly confined to aquatic birds; and of some of those we have most extraordinary accounts. It is said, that vast numbers of Geese, and even of the Hooping Swans are taken in Iceland and other northern parts, (owing to this defect) by the natives, in the month of August: but we may rather conclude that most of these are young birds, not yet capable of flying, for it is well known, that the common domestic Geese and Ducks never throw out their quill feathers till they are full-grown.

SCOTER-DOUBLE. Vide Duck-velvet.

SCOUT. Vide Guillemot-foolish and Auk-Razor-bill.

SCOUTINALLEN, or SCOUTINAULAN. Vide Gull-arctic.

SCRAYE. Vide Tern-common.

SCREAMER. Vide Swift.

SEA-CROW. Vide Auk-razor-bill.

SHAG. Pelecanus Graculus.

Bewick Br. Birds, ii. t. p. 390.

PROVINCIAL.

Skart, Scarfe, Green-Corvorant.

We have been assured, that the Shag was shot as far inland as Newbury, in Berkshire; a very rare occurrence for it

it to desert salt-water, but probably enticed so far by that noble river the Thames, into which the Kennet flows.

SHAG-CRESTED.

Pelecanus cristatus. Fauna Groenl. No. 58?
Brun. No. 123.
Procellaria cristatus. Mull. Zool. Dan. Prodr. No. 150.

It is not surprising, that two birds so similar in plumage and general appearance, as well as in habits, as the Shag and the Corvorant, should be frequently confounded. This we find to have been sometimes the case in their plain or uncrested state: so also these birds have been occasionally confounded in their crested state; but in the crested varieties there are stronger marks of distinction about the head, than in their common plumage, and the usual characters equally obvious, viz. the superior size, as well as the greater number of feathers in the tail of the Corvorant.

The crested Shag seems to have been considered as distinct by some of the northern Naturalists, Muller and Fabricius have described it: and Mr. Pennant first introduced it into the catalogue of British birds. Fabricius has considered this bird when destitute of the crest, as the young of the Corvorant.

That the Corvorant and the Shag are distinct species no one will at present deny; and that the Crested Corvorant is only an accidental variety of the common, *Pelecanus carbo*, we have given abundant proof in the account of that bird. With this knowledge therefore, that the common Corvorant occasionally varies its plumage in more than that of throwing out a crest, there is good reason for concluding, that the Shag is equally subject to a similar variation.

In the *London Museum* there are two Crested Shags, said to be the two sexes: an engraving of one was sent to us by

by Mr. Bullock, on which is the following note: "killed by me on the Bass Island, 9th of May, 1807, a female and breeding at the time."

This bird is in every respect like the common Shag, but that the feathers on the back of the head are a little loose, elongated, and pendant; and on the crown is a tuft of erect feathers. It has no white about the face, nor on the thigh, as in the crested variety of the Corvorant; nor fourteen feathers in the tail, the leading character of that bird in every variety. Under all these circumstances, whatever may be the existing cause of such an occasional luxuriance of growth in the feathers of the head, not a doubt exists of the crested, and common Shag, being of the same species, and should have the whole of their synonyms united.

It should seem the Shag is subject to vary in the form of their occasional crest, for we are told by some, that the crest is constituted by a long tuft of dusky feathers on each side the head, reaching beyond the crown.

SHEARWATER. Procellaria Puffinus.

We are assured by Mr. Fleming, that this species appears in Zetland only in ~~winter~~ summer; and that in addition to the Zetlandic name of Lyre, Lyar or Lyrie, it has acquired the Norwegian names of Skrabe or Skraap.

SHIELDRAKE. Anas Tadorna.

Lath. Syn. Sup. ii. p. 353.

Lin. Trans. iv. p. 117. t. 15. f. 8. 9. (trachea)

Bewick Br. Birds, ii. t. p. 341.

PROVINCIAL.

Sheldrake, Skeldrake or Scaledrake, Skeel-goose, or Skeel-duck. Skeeling-goose.

This is one of the very few species of Duck, that can be strictly

strictly called indigenous to these realms; many breed in various parts of the united kingdoms; but it is probable more are observed in the winter, when those of Iceland and other northern parts can no longer find sustenance in the bogs and estuaries of those boreal climates.

It is found in almost the whole of Europe, and some parts of Asia, contiguous to the coast, for it rarely quits its marine station by choice; so seldom indeed is it observed on fresh water, that it has been doubted if it could long exist without the marine element. From our own experience, however, these birds appear to enjoy perfect health in confinement, provided they are allowed communication with a pond; and they feed on grain as readily as the common Duck, and equally partake of any aquatic plants.

The *trachea* of the male is furnished with a singular labyrinth, consisting of two roundish bladders of a most delicate texture, one of which is larger than the other, both are uneven on the surface, and of so tender a fabric as scarcely to bear the pressure of the finger without indenting or breaking. In a very young subject, before the black round the bill appeared, we observed the labyrinth was very small and membranaceous, but to a person conversant in these matters, might have been a sufficient guide to the species.

The young of this species previously to their first moult are materially different from the parent birds. The bill and legs are flesh-colour: the crown of the head, and back of the neck dusky-brown: the forehead, and cheeks, as far as the eyes, the under part of the neck, and whole under parts of the body white: the quills are black, tipped with white, except two or three of the first: the speculum, and bay feathers of the wing next to the body, like the adult, but the former tipped white: the coverts white, tipped dusky, giving them a mottled appearance: the tail feathers are also more or less mottled at their ends.

The

The difference in the appearance of the young birds may have occasioned them to be mistaken for a distinct species but an attention to the speculum, and bay tertials will be an unerring guide.

It is somewhat singular that the front of the head should be white, when the rest of the head and back of the neck are of a dark colour; and when in the first change, the whole of these parts become green-black, it is the white feathers round the bill and face, that are first displaced by the black in the autumn of the first year.

A young domesticated male at two years old, had the fore-part of the neck and breast elegantly mottled with castanea and white.

These birds seem to pair and continue so throughout the year in their native haunts, and we have observed the same, particularly in confinement: the female drives and scolds other males that attempt to pay court to her. In the courting season, which commences very early, the males erect their heads, and partly the feathers on the back of the head, and utter a singular shrill note, attended with a toss of the head.

The males do not appear to attach themselves to the females till the second year; and their puberty is strongly characterized by a very considerable enlargement of the knob at the base of the bill, which in the courting season, not only increases at all periods of life afterwards, but also becomes of a fine coral red.

The defect of breeding appears to be with the female, (for we believe it rarely happens in a confined state) she is constantly coy although so strongly urged by the other sex, who it seems has every inclination; and this appears the more likely, since we are assured the Shieldrake has been known to breed with the common Duck, in Lord Stanley's menagerie.

SHELLY or SHELL-APPLE. Vide Finch-chaf.

SHILFA. Vide Finch-chaf.

SHOVELER or BLUE-WINGED SHOVELER.

Anas clypeata Lin.

Lath. Syn. Sup. ii. p. 353.

Lin. Trans. iv. p. 109. t. 13. f. 4-5. (trachea)

Bewick Br. Birds, ii. t. p. 345.

Anas muscaria Lin. Syst. i. p. 200 B—Raii Syn. p. 146—Will. p. 287.

Anas clypeata ventre candido Bris. vi. p. 337. A—Id. 8vo. ii. p. 451.

Tempatlahoac. Raii Syn. p. 176—Will. p. 299—Id. Angl. p. 387—Lath. Syn. vi. p. 511. A. B.

Anas rubens Gmel. Syst. i. p. 519—Ind. Orn. ii. p. 857.

Redbreasted Shoveler. Br. Zool. ii. No. 281—Lath. Syn. vi. p. 512.

Barbary Shoveler, Shaw's Trav. p. 254?

The labyrinth of the *trachea*, belonging to the Blue-winged-Shoveler, is a very small, roundish, bony arch, well explained in the *Linnean Transactions* referred to.

The very great difference in the size and weight, as well as in the plumage of this species, have long made us suspect that one of the changes incident to it, might turn out to be the Red-breasted Shoveler.

Our great attention to the change of plumage in all the Duck tribe we have been able to procure alive, has been the means of much knowledge on this important subject, not a little aided by strict attention to dead specimens, killed in different seasons of the year. From all these observations collectively, we have no doubt remaining, but that the Red-breasted Shoveler is no other than this bird in one of its accustomed changes, either intermediate between the young and the adult, or the annual change of the adult, similar to

what we have related of the Pintail: but before we proceed to describe the bird in this probable annual change, we shall describe one or two, somewhat varying from what was given in the former part of this work.

A male and female, taken together in a decoy in Lincolnshire, about the middle of April, were sent to us by Mr. Wright of Wainfleet. These appeared so much smaller than any before examined, that for some time we could hardly persuade ourselves they were not a distinct species. The male was fat, and yet weighed only seventeen ounces: the female was rather poor, and weighed no more than ten ounces and a half, which is less than that of a Teal. There was nothing material, however, in the plumage, to favour an opinion, that these could be distinct from the common Shoveler, and the *trachea* of the male at once evinced them to be such.

In the male, the head, neck, breast, and belly, the same as formerly described: the back is dusky-black, reaching up to the green on the neck in a peak; these feathers are slightly edged with cinereous: the rump, upper tail coverts, and from the vent to the tail, black, glossed with green; those that cover the sides of the tail, fine deep green: the lesser wing-coverts and scapulars the same as before described; as also the quill feathers, but tinged with blue on the outer webs of the primaries: the tertials next to the body are very broad at the base, and gradually narrow to a pointed tip; these are of a glossy purple-black, with a white stripe in two of them along the shaft, for one third of their length from the tip: one or two of the longest scapular feathers that fall over these, are similar: on each side of the base of the tail is a large patch of white: the tail consists of fourteen feathers, the middle ones dusky-black, with white margins, but the two centre have the margins minutely speckled; the rest are dusky-brown, with broader margins of dirty white: bill, irides, and legs like the former.

The

The female had the irides dull-yellow; the upper mandible dusky with the edge red-orange; the under mandible red-orange, except towards the tip. The plumage in general rufous-brown and black, the former occupying the margins of the feathers, gives a mottled appearance: the head and neck are streaked with black: the breast, sides of the body, and back, deeply margined with rufous-brown: on the belly the spots of dusky are very faint: the smaller coverts of the wings blue like the male, but less brilliant; and the other parts of the wings nearly correspond with those of the other sex, the speculum and tertials excepted, the first of which is tipped with white, the last are plain brown: the tail dusky with rufous borders, becoming paler on the outer feathers: the scapulars and rump like the back: the vent, and tail-coverts like the adjoining parts: legs dull orange.

Another male rather larger, had the back and scapulars mottled-dusky and white.

The *Anas muscaria* of Linné, differs from the original, only in having the belly white, and breast rufous.

The *Tempatlahoac* of Ray, appears to be another variety from Mexico; the principal difference in this is, the upper parts of the body being mottled with semicircles of brown and white.

We shall now proceed to the description of what we consider a variety of the Blue-winged Shoveler, which has been so long established as a distinct species, under the title of Red-breasted Shoveler.

It will be recollected that this bird originated from Mr. Pennant, who says it is sometimes taken in the decoys of Lincolnshire.

Most collectors have searched in vain for the Red-breasted variety, but we believe not from its peculiar scarcity, but because it is only to be obtained at a certain period of the year, and that, when neither the gun is in use, nor the decoys in general open.

The bird hereafter described was shot on a fresh water lake, on the south coast of Devon, Aug. 5th, 1807.

The weight twenty-one ounces: length nineteen inches and a half. The bill and irides like the other: the crown of the head, and nape dusky, the feathers a trifle elongated behind; the checks, throat, and upper part of the neck pale brown, with a slight rufous tinge, and speckled with dusky; the chin with larger spots of green-black: the back and scapulars dusky, the former margined with rufous-brown, the latter with rufous white, and glossed with purple: the rump dusky, glossed with green and purple: the coverts of the wings blue, the larger series tipped with white: the speculum purplish-green, variable in different lights: some of the tertails purple-black, with a white streak down the shafts, resembling the wing of the original bird, except in the primary quills, being rufous-brown with dusky tips: the upper part of the neck before, the breast, sides, and belly to the vent ferruginous, spotted with dusky-black: behind the vent, the sides of the rump, and under tail coverts pale rufous-brown and white, spotted as the last: the middle tail-feathers dusky, the others are mutilated, but by their stumps appear to have been brownish-white: the legs like the original.

Upon dissection, the sexual organs were not discernable; but an attention to the *trachea* made the sex evident, and also proved most incontrovertibly, by the exact similitude of the labyrinth to the Blue-winged Shoveler, that it is identically the same in one of the mutations of plumage to which many of the tribe are known to be subject.

Having most clearly demonstrated that these birds are of one species, in which we have evinced the very essential advantage of attending to the *trachea*, it may be proper to remark that this specimen is evidently not a young bird, that is, not of the same year it was taken, for it was in moult; many

many of the wing and tail feathers are in the state of recent change, and the new ones appear as usual brighter, and the darker ones not so brown: the only part that indicates the usual green head, is the chin, where there are several spots of that colour.

From the circumstance of this bird being alone before the breeding season was scarcely terminated, or at least before the young of the Duck tribe are usually capable of flying, we are induced to believe the Shoveler may not pair the first year; and the inconspicuous state of the sexual organs seems to confirm it. At any rate we may fairly conclude, that what has been termed the Red-breasted Shoveler, is the intermediate plumage incidental to the species between the spring and autumn, as we have shewn with respect to that of the male Pintail Duck, to which we refer for further particulars concerning this curious and unexpected annual change. This circumstance must be admitted to be a discovery of considerable importance to the science, and advantage to the Ornithologist, whose vision is as it were extended beyond the appearance of the object before him. Experimental physiology, like experimental philosophy, is the test of truth, the basis of incontrovertible facts, on which we may safely reason, and build our hypothesis without danger of the edifice falling.

Age may and will occasion some difference in these intermediate annual changes; thus we find a specimen, in the collection of Lord Stanley, much more rufous on the breast. The *Anas muscaria*, which is described as *pectore rufescente*, is a bird of this species in the intermediate change: but the *Anas clypeata ventre candido* of Brisson, should seem to be only an accidental variety.

Although we have already dwelt long upon this species, yet we cannot omit any thing that may serve to elucidate the subject. It has been said, that the female of the Red-breasted Shoveler has all the colours fainter, and the speculum of the wings blue.

On the 24th of November, 1809, we were favoured with a Shoveler by Mr. Holdsworth, which weighed twenty ounces and a half; and measured in length twenty inches. From the superior size of this bird, which seemed to be at variance with the plumage, we suspected it to be a male of the first feather; but upon dissection, the *ovaries* were evident, and the *trachea* destitute of labyrinth.

This bird then, we may conclude, is that which has been assigned to the Red-breasted Shoveler, as the other sex; and indeed the ferruginous appearance of its plumage beneath, might fairly have induced those, who wanted to find a female for that bird, to couple them together.

The bill of this specimen is olivacious-green above; the edges and under mandible orange: irides dull yellow. The head and upper part of the neck brown, minutely spotted with black: the chin and throat plain pale brown; the lower part of the neck before, the sides of the breast, and sides of the body under the wings pale rufous-brown, spotted with black, the spots becoming larger on the under parts; in fact each feather is dusky-black, margined with rufous-brown: the middle of the lower breast and the belly, appear to be entirely pale rufous, the feathers being so deeply margined as not to expose their dusky part; about the vent and the under tail coverts like the sides of the body; the back and scapulars are dusky, slightly margined with pale rufous, inclining to white on the hindmost scapulars: the rump dusky-black with small obsolete spots: coverts of the tail partly barred, and margined with pale ferruginous and dusky-black: the wings like those of the other female, except that one or two of the tertials are white at the tip; and it is remarkable, that the secondaries which constitute the speculum should in the females be tipped white, and not in the males; tail consists of fourteen cinereous-brown feathers, margined with rufous, except the two middle ones, which are dusky-brown. It is

singular

singular, that this female should weigh nearly double that before described, and larger by several ounces than the male in full plumage, previously mentioned. This, however, only exemplifies the very great difference in the size, as well as in the plumage of individuals of this species.

It is evident this female is not in her first plumage, and consequently not a bird of that year, in which she was killed, for there are some of the old feathers not cast, in particular the fourth feather of the tail on each side, which are easily ascertained to be old feathers by their dingy colour and ragged tips; these old feathers are not in other respects different from their outer neighbours, except in not being half so deeply margined. From the superior weight it should appear, that this is an old and fully matured female, and that the smaller one with all the feathers more deeply margined, is a young bird; and this is consonant with experience, that young birds in general have their plumage more maculated.

It has been said that the Shoveler will not live in confinement; it is true the curious pectinated structure of the bill indicates an insectivorous food, but we doubt not, that by degrees, it might be induced to adopt a substitute, as Ruffs, Godwits, Woodcocks, and Curlews, are well satisfied with bread and milk.

It has been supposed that Shovelers breed at present in our fens, but all our enquiries on that subject in Lincolnshire went to negative the opinion.

SHRIKE-CINEREOUS. Lanius excubitor.

Bewick, Br. Birds, 1. t. p. 60.

Shaw Zool. vii. p. 282. t. 37.

PROVINCIAL.

Murdering-pie. White-whisky-John.

Although this species is said to breed in France and other parts

parts of the European continent, and occasionally visit us, we never could ascertain that it bred in England.

In the latter end of February, 1807, we received a male from a friend, near the coast of Lincolnshire: this, and two or three others of the same sex, obtained also in the winter months, indicate that it only accidentally comes to us in its autumnal migration from the north of Europe to a more southern climate: and that by some adverse winds or other occult causes, they are sometimes forced to vary their longitudinal course, and are driven on the eastern parts of Great Britain.

Mr. Pennant says the female has a brown bar beyond each eye.

SHRIKE-RED-BACKED. Lanius Collurio.

Lath. Syn. Sup. ii. p. 69. Shaw Zool. vii. p. 315.
Orn. Danmo, 1. t. 2.
Bewick Br. Birds, 1. t. p. 62.
Levaill. Ois. ii. p. 50. p. t. 69.
Sonnini Trav. iii. p. 319.

The Red-backed Shrike is said to be common in Egypt, where it is called *Dagnousse*, and are caught in large numbers in nets and sold alive, the law forbidding them to be eaten, as well as others, till they have been bled; and as these birds severely bite the fingers when handled, the bird-catchers tie their mandibles together with one of their feathers.

Is not uncommon at the Cape of Good Hope and in other parts of Africa.

We have not heard of its being seen in the more northern parts of England, but from the authority of Mr. Dickenson it inhabits Shropshire about Tichfield and Walsal. It has been noticed throughout the whole longitudinal extent of Devonshire, and from thence eastward, to the opposite coast of the kingdom; but we are not sure it has been observed

far in Cornwall; nor have we ever seen it in the southern promontory of Devon, though we have heard of one being killed in that part.

SHRIKE-WOOD. Lanius ruficollis.
Wood-Chat. Orn. Dict.
Lath. Syn. Sup. ii. p. 70.
Shaw Zool. vii. p. 316.
La Pie-griesche rousse. Levaill. Ois. ii. p. 46. Pl. 63.

It will be observed that in the former part of this work, we had expressed some doubts about the distinction of this species from that of the Red-backed-Shrike. In this we were not singular, but rather formed an opinion upon that of other respectable authors, after consulting the description and habitat as related by them; for it is esteemed so rare in England, that we question if there is at present a specimen in existence that was killed in the island. Even on the continent its rare occurrence has occasioned discrepancy of opinion. Doctor Latham in his second Supplement acknowledges never to have seen but one specimen, and that in the *Leverian Museum;* so that if with the extensive researches of the Doctor, and with the immense variety of species from all parts of the globe that have passed through his hands in critical examination, we find only one solitary instance of his identifying the bird in question, it is scarcely to be wondered that suspicions were created. On the authority, however, of M. Levaillant, the Woodchat, not materially differing from the European species, is not uncommon, at the Cape of Good Hope, especially the interior parts of it; and is also met with at Senegal.

A specimen of the Wood-chat lately come into our possession is about seven inches and a half in length: the bill is dusky horn-colour: the fore-head, and sides of the head, taking in the eyes, and coverts of the ears, passing a little behind

behind on the sides of the neck, black: the crown, back of the head, and hind neck, bright bay: upper part of the back, and wing coverts dusky: scapulars white: rump dusky-grey: upper tail-coverts grey: quills black, with white at their base, forming a conspicuous bar on the wings, but partly hid by the tertials when closed: all the under parts from chin to tail sullied white, except a patch of chesnut on the lower belly: the outer feather of the tail is more than half white from the base, and margined with the same, leaving a long black spot on the outer web near the end; in the other lateral feathers the white decreases gradually at the base, till lost in the four middle feathers, which are wholly black; but in several of the outer feathers there is a small spot of white on the inner web at the very tip: legs dusky-black.

From a minute examination of this specimen, we can no longer doubt, that the Woodchat is perfectly distinct from the Red-backed Shrike. In the make of the two species, the cuneiform shape of the tail, form of the bill, and size, (but this is rather larger) there is great similitude, at the same time there are characters which must form specific distinction. When critically examined, it is observable, that the markings are different in form as well as colour, but the dusky colour of the upper parts of the body, the black legs, and above all the white scapulars, cannot in any stage or variety, belong to the Red-backed species; and it is very improbable that the bay head should be given in a state of adolescence, to be discharged again in maturity.

It must be well known to those who have penetrated deeply into the mysteries of nature, that there are certain colours that under certain circumstances, denote maturity; that pure white, full black, and the more gaudy tints, are usually marks of maturity. Thus we cannot suppose that at any age or season, the Red-backed Shrike would become black

black on the back with white scapulars, or possess a bay crown or black legs, except by accident, a mere *lusus naturæ*; and that cannot now be suspected. Besides, if we attend to the plumage of the Red-backed species, which constantly breed with us in considerable numbers, we find that all the young, when they leave us in the month of September, very much resemble the adult female; and the whole return to us again in about six months, in their full sexual plumage; a proof that the young arrive at maturity the first year, and propagate the ensuing spring. With this certainty, it would be most inconsistent with all the known laws of nature, and with the experience of every Naturalist, to suppose that the young Red-backed Shrike changed its plumage to that of the Wood Shrike, and again to that of the adult Red-backed species, and this in the course of the few months they are absent in a more southern climate, and out of the breeding season. It is well known, that all young birds, without exception, at first mostly resemble the parent female, and by degrees, those of the male sex become more masculine in plumage; but the intermediate state partakes more or less of both; and in no instance is so totally unlike either as the bird in question. If on the other hand, the old birds of the Red-backed species were capable of such a change, that which characterizes the Wood Shrike would undoubtedly be their courting garment; those colours which we noticed before as marks of maturity, would have been assumed when the exhilarating passion of love and soft desire fired their little breasts; it is then and then alone, that every feather has its gaudiest tint. With all these reflections, founded on the known laws of nature, evinced by daily experience, we can have no more doubt of the identity of these two Shrikes as distinct species, than we have that they are different from the Cinereous Shrike; for there is not a greater difference between them, than between the Red-backed and the Wood Shrike.

It

It must also be recollected, that the Red-backed species has frequently been kept in confinement, and no such change has ever been noticed: those we had caged, unfortunately died before the return of the breeding season, but the appearance of some new feathers, indicated the regular change to the adult plumage by the usual course.

SISKIN.

Fringilla Spinus. Lin. Syst. 1. p. 322.—Gmel. Syst. 1. p. 914.—Ind. Orn. i. p. 452.—Sep. Vog. t. p. 135. Ligurinus. Raii. Syn. p. 9. A. 5.—Will. p. 192. t. 46. Briss. iii. p. 65. 4. Id. 8vo. i. p. 325. Le Tarin. Buf. iv. p. 221.—Pl. Enl. 485. f. 3.

Siskin or Aberdivine. Br. Zool. No. 129. t. 53. Id. fol. 109. t. v. Arct. Zool. ii. No. 243. Id. p. 383. I. Albin iii. t. 76. Id. Song birds, t. p. 83. Lewin Br. Birds, ii. t. 82. Lath. Syn. iii. p. 289. Id. Sup. p. 166. Bewick Br. Birds, i. t. p. 171. Harm. Rural. p. 26.

The unaccountable omission of this species of Finch in the original part of this work was not discovered until the whole was printed.

The Aberdivine or Siskin, is in size between that of the Greater and Lesser Red-poles: length four inches and a half. Bill whitish, with the tip black: irides dusky: top of the head black; hind head and all the upper parts of the body yellowish-green, mostly yellow on the rump, the feathers streaked down the shaft with dusky: sides of the head, chin, throat, and breast, greenish-yellow, without spots: middle of the belly whitish; sides tinged with yellow, and marked with large dusky streaks: under tail-coverts the same: lesser wing-coverts like the back; the series immediately impending the greater coverts mostly yellow; the greater coverts black, tipped

tipped with yellow; these form two yellow bands across the wing, divided by one of black: quills dusky, the primaries slightly edged with greenish yellow on the outer web, and at the base of the inner; the rest of the quills edged with the same on their outer webs only, near the ends, the base of each feather, for nearly one half, pale yellow: the tail is considerably forked, the two middle feathers dusky; the rest yellow half way from the base, the ends dusky, slightly edged with yellow on the outer webs: legs pale.

The female differs from the other sex in having the crown of the head dusky and grey mixed, and the plumage in general much less vivid.

Young males, in their adolescent state, have the black feathers on the head margined with brown, and the colours, though brighter than the female, are not so vivid as in the adult.

This species is sometimes observed in England in the winter, in company with the Lesser Red-pole, picking out the seeds from the cones of the alder trees. It does not we believe breed with us, but leaves this country on the approach of spring: Mr. Bolton, however, in his *Harmonia Ruralis* asserts, that it breeds in Westmoreland. Willughby says it visits Sussex about the time of barley sowing, and is there called the Barley-bird. It is, however, more an accidental, than a constant migrant to this country, or at least it is by no means common, but extremely local; a natural conclusion, when only one instance has occurred to us of meeting with the Siskin at large, and that was a solitary female in the month of January: and in only two instances have we been favoured with it from our numerous friends.

It is occasionally taken by the bird-catchers in the neighbourhood of London, where it is known by the name of Aberdivine; and though its song is below mediocrity, sells for a tolerable good price to bird-fanciers, who sometimes

pair

pair it with a Canary bird, with which it is said to breed freely.

The Siskin is found in many parts of Europe: in Germany they are said to do great injury to the hop gardens, by picking out the seeds. In the western and southern parts of Russia are plentiful, but are not met with towards the Uralian chain, nor in Siberia.

In the month of December, 1805, a small flock of these birds were observed busy in extracting the seeds from the alder trees, in the south of Devon, several of which were shot. The weather was severe, and a heavy fall of snow succeeded.

Sepp has delineated the nest, placed in a fork of a tree, built with dry bents, mixed with leaves, and amply lined with feathers. The eggs, three in number, of a dull white.

Some varieties of this species are described, but whether all such really belong to it may be questioned hereafter; one is said to inhabit Silicia, and another South America.

The irregular migration of this bird has been noticed on the continent: Buffon speaks of immense flights once in the course of three or four years. Are said to breed in the forests bordering on the Danube, but conceal their nest with such art, as to render it extremely difficult to be found.

Mr. Bewick remarks, that one which was taken on the banks of the Tyne, and kept some years in a cage, had a sweet and pleasing song; that it imitated the notes of other birds, and was familiar, docile, and chearful.

SKART. Vide Shag and Corvorant

SKEEL-GOOSE, SKEEL-DUCK, or SKEELING. Vide Shieldrake.

SKELDERDRAKE. Vide Oyster-catcher.

SKELDRAKE. Vide Shieldrake.

SKELLY. Vide Finch-chaf.

SKITTY. Vide Gallinule-spotted.

SKRABE. Vide Shearwater.

SMEW. Mergus albellus.

Mergus albellus and minutus, M. and F. Lin. Syst. Lath. Syn. Sup. ii. p. 338.

Lin. Trans. iv. p. 234. t. 16. f. 3. 4. (trachea)

Petit Harle huppè, La Piette, Buf. Ois. viii. p. 275 t. 24— Pl. Enl. 449.

Smew. Bewick, ii. t. p. 264.

Red-headed Smew. Bewick, ii. p. 266 (female)

Lough-diver. Bewick, ii. p. 268. (male immatured).

The fact having been established beyond contradiction, that the minute Merganser and the Smew are of the same species, but of different sexes, we request that the synonyms of these birds, given in the former part of this work, may be connected and added to the above.

Doctor Latham had long ago ascertained, that the young males continued in the plumage of the females for some time, (at least two years) by dissecting many, the *trachea* of the supposed male Minute Merganser was found to be exactly similar to that of the Smew, except that the labyrinthic parts were less ossified.

If any thing was wanting to confirm this decision, founded upon the clearest evidence, we could bear testimony of the fact from ocular demonstration, having at this time before us a specimen of a young male in the very act of changing from the plumage of the female, or *Mergus minutus*, to that of the male, *Mergus albellus*. This bird and an old or matured Smew, was sent to us the latter end of December, by Mr. Holdsworth, which gave an opportunity of comparing the *trachea* and which completely verified the account given by Doctor Latham: indeed in this young specimen the labyrinth was fully ossified.

This young male has a few feathers of the adult plumage put

put forth about the breast and neck, especially the black feathers tipped with white, denoting the approach of those bands, so conspicuously beautiful in the adult. The feathers on the crown are more rufous, and the crest longer than in the female, and the patch on the wing is not pure white, but mottled with brown. The secondary quills and their greater coverts are black, slightly tipped with white, making two slender white lines across that part of the wings. Both these birds had the usual number of tail feathers, (sixteen) and their legs and toes equally of a blue grey colour, with dusky webs. The old bird weighed twenty-four ounces, and measured eighteen inches; the young one sixteen ounces, and seventeen inches in length.

For a figure of the *trachea* we refer to the *Linnean Transactions* above quoted, which will convey a much better idea of its structure than any words can express; however, in conformity to our plan of general information, we shall transcribe the description of it from Doctor Latham's account, as being perfectly correct, and corresponding with those in our possession.

"The *trachea* or windpipe of this species (says the Doctor) is smallest near the upper part, but enlarges as it approaches towards the middle, from whence to the bottom, it continues nearly of equal dimensions, the texture consisting of completely bony rings, with scarcely any cartilage intervening; at the bottom is a bony cavity as in the others, smaller in proportion, and differing in shape, the greater expanse being from side to side, whereas in the other it is almost upwards and downwards; on one side is a round hole, covered by a drum-like membrane, and on the opposite, an oval smooth hollow bone uniting with it: from the bottom arises the *branchial tubes*.

This is by far the most plentiful species of Merganser that frequents our coasts and fresh waters in the winter; but we believe

BROWN SNIPE

believe has never been known to breed in this country. It is naturally shy, and readily takes wing, being as expert in air as it is in water, where indeed, if it is surprised, it is with difficulty shot, by reason of its incessant diving. At the time of writing this account, there are two White Wigeons (as the full plumed males are sometimes called by the natives) on a piece of fresh water not very distant from us, but too wary to be shot. The females and young birds are called in the southern part of Devonshire, Vare-Wigeon, from a supposed similitude about the head to a Weesel, which is denominated *Vare*. Possibly this is the bird which in some parts has been called Smee.

In the account given by Mr. Bewick of a tunnel for catching wild fowl, we find the following note, which appears to have been collected from a person of the name of Bonfellow, of Stockton, in Norfolk. "Duck and Mallard are taken from August to June, Teal and Wigeon from October to March. Becks, Smee, Golden-eyes, Arps, Cricks, and Pintails or Sea-pheasants, in March and April. Poker Ducks are seldom taken on account of their diving and getting back in the pipe."

SNIPE-GREAT. Scolopax major.

Scolopax paludosa, Ind. Orn. ii. p. 714.
Gmel. Syst. p. 661.
Scolopax Gallina, Sepp. Vog. 3. t. 127.
—media, Ger. Orn. iv. p. 446.—atra, Ib. 450?
Becasse des Savanes, Buf. vii. p. 481.
Savanna Woodcock, Lath. Syn. v. p. 132.
Great Snipe, Lath. Syn. Sup. ii. p. 308.
Rural Sports, t. p. 444.
Bewick Br. Birds, ii. p. 67.

In the second Supplement to the *General Synopsis*, the

Great Snipe and the Savanna Woodcock, are we think very judiciously brought together, consequently the synonyms, given in the former part of this work, must be connected with the above. In the same work, is given a very full description, from a recent subject, shot in Suffolk, in the month of Sept. and which so exactly corresponds with a specimen in our collection, that we shall take the liberty of transcribing it:— weight eight ounces and a quarter: length from the bill to the end of the tail, twelve inches; to the end of the toes sixteen: bill two inches and three quarters, (sometimes as much as four inches) black; the under mandible pale half-way from the base: the top of the head brown, mottled with rufous; down the middle a clay-coloured line; sides of the head pale clay-colour, speckled with brown: through the eye, from the bill, a dark brown streak, and a paler one curving round the under mandible: hind part of the neck, half the back and scapulars, chocolate-brown; the feathers streaked on the sides with clay-colour, and barred with ferruginous; the lower part of the back brown, crossed with numerous greyish-white lines: tail-coverts pale rufous clay-colour, barred with black-brown, and so long, as to cover the tail for two thirds of its length: the tail when spread is rounded at the end; the eight middle feathers are dusky for three-fourths of their length from the base, the rest of the length rufous, crossed with two or three bars of black; but the four middle feathers are deep rufous, and the two on each side of these very pale; the two outermost feathers on each side wholly black and white in alternate bars: the wing-coverts black-brown, spotted with rufous-white; the rest of the wing dusky-black; every feather but the greater quills tipped with white: beneath the wings beautifully crossed with white and dusky bars: the fore part of the neck is the same as behind: the breast, belly, and vent crossed with numerous dusky bars: inclining to a zigzag shape on the sides: legs pale bluish-brown, and bare above the knee for half an inch. Two

JADREKA SNIPE

Two of the Great Snipes in one case, in the late *Leverian Museum*, were marked as having been killed in Lincolnshire; one was larger than the other, but similar in plumage. In these the breast and belly had each feather marked with an angular ferruginous bar; which gives the undulations observed in the markings on those parts.

We believe this species to be really very rare in England, though it may accidentally happen, that one is shot and consigned to the palate of the epicure.

Mr. N. Luscombe, a gentleman to whom we are under obligations for several rare birds, and whose attention to the subject of native ornithology, may stamp authority to his observations, assures us, that in hunting an alder bed for Woodcocks in the month of February, he flushed a Great Snipe twice, but was unable to kill it. This gentleman says, the flight of this bird is very different from that of the Common Snipe, resembling more that of a Woodcock: when it rose it emitted a cry something like the former, but shorter, and of a deeper tone.

SNIPE-JADREKA. Scolopax limosa.

Some doubts have existed whether there really is a specific distinction between this and the Red-Godwit; and indeed it must be admitted, that their general appearance might favour the opinion, that they were varieties of the same species, especially as it is well known the latter is subject to much variation. It is true, the rarity of both, precludes the possibility of obtaining their habits, or of making many comparative observations.

The Jadreka Snipe, in our collection appears to be distinct from our specimen of the Red-Godwit: it is larger, much longer in the legs and bill; and a very remarkable difference is observable in the claws; for in this they are concave and truncated, as if cut off at the ends.

In the description given of this bird in the former part of this work, (which it will be evident to the scientific ornithologist, was borrowed from good authority, never at that time having examined the species) we were led into a mistake with respect to the disposition of the white on the tail; for instead of the feathers being white at the *ends*, the word *base* should be substituted. Such is the Linnæan description, and is the general accepted character. It was a mere accidental mistake, and has been corrected in the subsequent works of the same highly respectable author. But in addition to what has been stated above, with respect to the essential characters of distinction, the following description from a specimen before us, will give a better idea of the bird in question, when coupled with the figure which accompanies it

The cheeks and chin are speckled with pale ferruginous; from the upper mandible a pale streak runs over the eye; beneath that a dusky one: the neck and breast cinereous, mottled with pale ferruginous; on the latter and along the sides, the ferruginous markings become less frequent, but form evident distant, irregular, broad, transverse bars; these markings are occasioned by the ends of some of the feathers being more or less ferruginous: the belly is white with only a few scattered spots: the thighs pale rufous-brown, mixed with white: the feathers of the back and coverts of the wings brown, with pale margins: quills dusky, at the base of most of them more or less white, but scarcely shewing any of the last colour when closed: tail a trifle forked, the feathers black for two-thirds from the end, their bases more or less white, except the middle ones; the exterior web of the outer feather white nearly to the tip: the coverts immediately impending the tail are black, and conceal the white at the base of the tail feathers; the rump is white, as well as the under coverts of the tail: the bill of this specimen is more than four inches in length, and appears to have been reddish for two-thirds of its length from the base, with the point dusky. When

RED-BREASTED SNIPE

Elgr. Bewick's sculpt.

When we offer our opinion that the *Scolopax Limosa* and *Lapponica* are really distinct, we do not pledge ourselves that they have not been confounded, and occasionally substituted one for the other: in those before us there are certainly apparent specific distinctions independent of plumage; for we are aware of the changes many of these birds are subject to from the influence of season and age.

SNIPE-RED-BREASTED.

Scolopax noveboracensis, Ind. Orn. ii. p. 723.
Gmel. Syst. I. p. 658.
Red-breasted Snipe, Arct. Zool. ii. No. 368.
Lath. Syn. v. p. 153.
Lin. Trans. ix. p. 198.
Scolopax hudsonica, Ind. Orn. ii. p. 720?
Hudsonian Godwit, Arct. Zool. Sup. p. 68?
Lath. Syn. Sup. p. 246?

The weight of this species is seven ounces and three-quarters: length fifteen inches. Bill three inches long, a little reflected, and of a dusky colour, except at the base of the under mandible, which is pale; the upper mandible longest by almost the eighth of an inch: irides dusky: orbits white: crown of the head ferruginous, streaked with dusky: sides of the head, chin, throat, fore-part of the neck, breast, belly, and sides, bright bay, palest on the chin, and with a few solitary white feathers on the belly: round the vent, and under tail-coverts, the feathers are white, tipped with bay, showing part of the white: upper part of the neck behind ferruginous, slightly marked down the shafts with dusky; lower part of the hind neck, upper part of the back, and scapulars dusky, spotted with ferruginous on the margin of the feathers: lower part of the back, and rump white, with oblong dusky spots down the shafts: upper tail-coverts barred dusky and ferruginous, becoming white at the base of

the feathers: prime quills dusky-black, the six first mottled with brown and white on the inner webs towards the base; the secondaries cinereous, margined and spotted with white; the shafts of all more or less white: greater coverts of the prime quills black; from the fifth tipped with white; those of the secondaries cinereous, the inner webs spotted with white; lesser coverts a mixture of dusky, cinereous, and white, dashed with ferruginous, with a few feathers near the quills spotted ferruginous like the back: under wing-coverts white, elegantly barred, and spotted with black: tail nearly even at the end, the two middle feathers rather the longest, the whole marked with eight or nine alternate bars of black and white quite to the base, forming, when the tail is spread, so many concentric semicircular bands: legs dusky-black, two inches and a half long from the knee to the heel; bare space above the knee scarcely three quarters of an inch: toes marginated, outer one connected as far as the first joint to the middle one. This bird was shot near Kingsbridge, about the 21st of May, 1803, and proved a female.

Another specimen, killed somewhat later in the same year, was sent to us by Mr. Boys, who remarked that it was shot at Sandwich. This is a male, and weighed eight ounces: length to the tail fourteen inches three quarters; to the end of the toes sixteen inches and a half; expansion of the wings twenty-seven.

About the same time another of these birds was shot at Weymouth, out of a small flock that was observed there for two or three days, and from the account favoured us by the late Mr. Bryer, there was little or no difference from the two in our possession, which are so exactly similar as to render it impossible to ascertain the sexes by the plumage, except the lower belly, vent, and under tail-coverts being more ferruginous, with scarcely any apparent white, should be a sexual mark of distinction.

It

It should appear that these three specimens were shot out of the same small flock, as from the accounts received, they were decreased in the proportion to those known to have been shot.

From the lateness of the season it is probable this little family were hurrying from the south to the north in order to breed, and had coasted the island as far as Kent, and then perhaps the remainder crossed to the continent, and continued to coast it into the Baltic, and so on to the arctic regions.

On the second of May, in the year 1810, another of this species was shot near Bridgewater; and we are informed by Mr. Anstice, (who favoured us with it) that it was in company with some Whimbrels.

This proved to be a remarkable fine male, weighing ten ounces: the length sixteen inches: breadth twenty-eight and a half. The colour and markings nearly correspond with those before described, but the rump and lower part of the back under the scapulars are more white, having very few spots: the under scapulars are white marked with diagonal bars on each web, placed alternately: the ferruginous on the belly is also intermixed with rather more white than in either of the other specimens, and many of the feathers on the sides of the breast, and sides of the body under the wings have their shafts dusky.

The very superior weight of this specimen must partly be attributed to its excessive fatness.

It is not improbable this rare species has been confounded with the Red-Godwit, and many circumstances not worth relating have greatly confirmed this opinion. In a small collection of birds belonging to a medical gentleman at Marazion, in Cornwall, we recollect noticing a bird very much mutilated by insects, that was supposed to be the Red-Godwit, but we have now very little doubt but that it was of this

this species. The Red-Godwit is much longer in the legs and never of that complete bay colour, especially on the whole under parts; besides the tail alone would be at once a mark of discrimination, for in that bird it is invariably white at the base with dusky or black for the greater part of their length from the end, and never alternately barred as in the Red-breasted Snipe. Many other essential distinctions in plumage might be noticed, but these may be easily discovered by a comparison of the descriptions of the two birds; but as another special guide, it will be observed that in the Red-Godwit, and Jadreka Snipe, the end of the tail when nearly closed is concave, or a trifle forked; whereas in the Red-Snipe the middle feathers are rather the longest.

With respect to the identity of the Red-breasted Snipe in this bird, we have not much to instruct us, but the little which is to be found will bear us out in our synonyms except with respect to size. It is indeed described to be the size of the Common Snipe, but it seems to be so little known, that some latitude may be granted in this particular, since the only specimen which seems to have been noticed, was said to be an inhabitant of New York, and was preserved in the *Blackburnian Museum*, from which the description in the *Arctic Zoology* was taken. Neither the weight nor the measure of this specimen was obtained, and therefore some allowance may be made for bad stuffing, and imaginary size.

SNIPE-SPOTTED. Scolopax Totanus.
Bewick Br. Birds, ii. t. p. 88.

PROVINCIAL.
Red-legged Godwit.

Since the publication of the original part of this work, we have been favoured with another specimen of this rare species, from Mr. Anstice, who shot it near Bridgewater, in September, from

SPOTTED SNIPE

Eliza. Th. del.t et sculp.t.

from a small flock composed of several of the same species, and many more Redshanks, which had been in association for some time.

This bird is rather larger than the last described, and the legs longer. In the plumage there is also a little difference; the broad white streak above the base of the upper mandible to the eye and partly over it is more conspicuous; the markings on the breast and belly more distinct; the white spots on the outer margins of the secondaries and tertials, as well as other parts, being of a triangular shape, indicate an essential character: the shape of the tail, like that of the Wood Sandpiper, is rather singular, unless occasioned by feathers not being full grown; the two middle feathers are longest, and the outer feather on each side is longer than the two next.

In the *General Synopsis* and some other works, the middle feathers of the tail are described to be cinereous, or ash-colour, and only the lateral ones barred; whereas in all the specimens we have examined, the middle feathers are equally barred, and exactly similar to the others. We are also told that sometimes, the feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous colour. Mr. Bewick mentions a specimen shot in September, that had the upper parts more sparingly spotted than usual, and the breast, belly, and the inside of the wings, of a snowy whiteness; the sides under the wings also more delicately spotted with pale brown. This last we consider to be the plumage of maturity; and consequently ours are young birds, probably in their first years plumage; that killed in August had more brown beneath than the one killed in September, the same month in which Mr. Bewick's bird was shot.

SNOW-FOWL. Vide Bunting-snow.

SNYTH. Vide Coot.

SPARROW-

SPARROW-TREE. Fringilla montana.
Bewick Br. Birds, i. t. p. 162.

Having been taught to believe that the Tree-Sparrow was as common in some parts of Lancashire, Yorkshire, and Lincolnshire, as the House Sparrow, we expected to have no difficulty in obtaining a more perfect knowledge of the habits of this species by actual acquaintance with them in their native state, than any books had conveyed. In a tour through Lincolnshire we eagerly sought for the Tree-sparrow, and shot into every unfortunate flock of House-Sparrows we could find in our route, but without success, and began to despair of succeeding; when by an unlucky accident which detained us several days at Wainfleet, we were in a small degree recompenced by the discovery of the bird in question in that neighbourhood.

It will be recollected that authors have made a distinction between the sexes, by asserting that the female is destitute of the black on the throat and ears. It is also said to build in trees, but whether in holes, or in the branches, is not mentioned; these desiderata in the natural history of the species have perplexed and misguided many. Every House-Sparrow that has built its nest in a tree (by no means an uncommon occurrence) has at once been pronounced to be the Tree-Sparrow, and consequently that species has been supposed to be more plentiful, and more generaly diffused throughout England, than we have any reason to believe is the fact.

On a small estate belonging to Bethlam Hospital close to the village of Wainfleet, a few pairs of these birds had taken possession of some large trees (the only ones deserving the name of trees for many miles round) which after having been condemned, were reprieved upon a representation of their very great advantage to mariners, as a conspicuous landmark in such a flat and featureless country. Here then we

expected

expected to realize all our anticipation with respect to the natural history of this species, it being the height of the breeding season, (middle of May) and we soon procured a specimen by the assistance of a gun. In vain were all the trees examined for their nest; not even the House-Sparrow had resorted to these trees for to build amongst the foliage. Patience and perseverance, however, which overcome innumerable obstacles, let us into the secrets of these little creatures; for by concealing ourselves contiguous to some old pollard trees, (much decayed, especially where limbs had been cut off, leaving the trunk pervious;) to which several of these birds were observed to be more than ordinarily attached, we had the satisfaction of observing one of them enter a small hole. No doubts now remained of the place of nidification; and after suffering the bird to remain for some time it was driven out and shot, with a full expectation that it would prove a female, the other having possessed all the black marks which is asserted to characterize the male only. To our astonishment, however, this was exactly similar in markings; and we had yet to obtain the female. Two others were afterwards shot by us on the same tree, both of which corresponded exactly with those already in our possession, which occasioned a strong suspicion that there was some mistake in the usual description of the distinction of the two sexes; in consequence, these four birds were instantly dissected for preservation by a friend and companion in our tour, who was requested while yet the gun was in hand to send us the result of the enquiry: and as suspected, they actually turned out to be two of each sex.

Thus one point had been clearly brought to proof, and in consequence saved the lives of many others: it only now remained to enlarge the holes in the tree in order to search for the nests, which by the assistance of a chisel was soon effected, and the nests belonging to the two pairs of birds were

were taken each with four eggs. The materials with which the nest is made, are the same as commonly adopted by the House-Sparrow, chiefly hay and feathers. The eggs are also similar to those of that bird, but smaller, weighing from 34 to 41 grains.

The Tree-Sparrow appears to be much inferior in size to the House-Sparrow, but the difference in weight is only about a dram, this being six drams; and the length is inferior by half an inch, being five inches and a half; with no discrimination of sexes by size, or by colour and markings. The fact is, that the young, as in the common Sparrow, puts forth the black marks last, and consequently in the infant state of plumage it has been considered as the female. It is a much more elegant species than the House-Sparrow, and differs from that bird with respect to sexual distinction in plumage, for every one knows the cock from the hen of that very common species, *Fringilla domestica*. The note of the Tree-Sparrow would only be discriminated from the other by persons of experience in that science; it is, however, more shrill. So little do people in general know or discriminate the bounties of nature with which they are surrounded, that even the best informed in the neighbourhood did not know the distinction of these two species.

It is now perfectly clear this bird resides amongst trees only, and that it makes its nest in holes and cavities of such as are decayed, and never amongst the branches, nor in buildings.

This species may be considered as one of the most local of our indigenous birds; and we suspect, by no means plentiful in any part of England; but as the circumstance of House-Sparrows sometimes making their nest in trees, has occasioned an opinion that they are a different species, and have frequently been entitled Tree-Sparrow, it is extremely difficult to trace the true *Fringilla Montana*.

SPENCY.

SPENCY. Vide Petrel-stormy.

SPOONBILL. Vide Shoveler-blue-winged and Duck Scaup.

SPOONBILL-WHITE. Platalea leucorodia.

Bewick Br. Birds, 11. t. p. 25.

In the former part of this work mention was made, that the Spoonbill had been sometimes seen on or contiguous to the coast of South Devon. Since that period two have been shot, within a few miles of Kingsbridge, both of which are in our collection.

The first is a young bird by the colour of the bill, and short feathers on the back of the head; the plumage is white except the greater quill feathers, and the larger coverts belonging to them, which are more or less tipped with black, and the shafts mostly of that colour; the *alula spuriæ* are marked the same. Shot in November, 1804.

The other an old bird, in the highest state of beauty, being in its full plumage, was shot on the sixteenth of March, 1807; and though it had all the appearance of a male from the prodigious flowing crest, it turned out, upon dissection to be a female.

This beautiful bird weighed three pounds three ounces; measured thirty one inches to the end of the tail; and thirty eight inches to the end of the middle toe: length of the bill from the feathers on the forehead seven inches and a quarter; breadth of the spoon nearly two inches; the colour dusky, with transverse undulated ridges of black; the margin formed by a groove running from the nostrils, and surrounding the bill, is punctured; the point which for an inch is nearly smooth, is of an orange yellow; on the inside of both mandibles, near the base are several protuberances on each side: from the bill to the eye, and the orbits bare of feathers, and of an orange-yellow, without any fine down, described by some authors. The whole plumage is white, except the lower part of the neck, which

is yellowish-buff, becoming faint behind: the feathers on the top of the head encrease in length by degrees, those of the hind head are from three to five inches long, forming a most beautiful flowing crest of slender yellowish-white feathers. The Spoonbill has been rarely observed with this fine flowing crest, but probably this is lost after the breeding season, and not resumed till towards the following spring; for there can be no doubt that the male is possessed of such a crest as well as the female.

The *trachea* is somewhat compressed, and the cartilaginous rings are very fine and tender; at the lower part is a flexure, reflecting, and again returning, two inches or more in length, before it enters the cavity of the breast; this convolution forms somewhat the figure of 8, but the flexures only touch, not cross each other, and the points of contact are united by fine membranes. Buffon remarks the double inflection in the *trachea* of this bird, and compares it to what has been observed in the Crane. Willughby says "We did not observe in our bird those reflections of the wind-pipe, which Aldrovandus mentions and figures."

Surely Willughby must have been deceived, since it is now proved that the female has this singular flexure in the wind-pipe; and in no instance has that sex been observed to possess any singularity in that part, of which the male is destitute.

In the stomach of the specimen here described, there were several small fishes, in a half digested state, and some common Stickle-backs perfect in the *œsophagus*.

The flesh of this species is remarkably dark coloured when dressed, but well-flavoured, being free from any fishy taste.

It is remarkable that both these birds were killed in company with the Common Heron.

SPURRE. Vide Tern-common.

STERN. Vide Tern-black.

STINT-

STINT-LITTLE. Vide Sandpiper-little.

STORK or WHITE STORK. Ardea-ciconia.

Bewick Br. Birds, ii. t. p. 32.

Wood Zoography, i. t. p. 519.

Black Stork. Annals. V. 455.

The Stork, although a bird of passage, covering a vast extent of territory in its annual migration from Persia and other parts of Asia and Africa, into the northern parts of Europe as far as Sweden, and in the lower parts of Russia; spreading into Holland, and into Spain, especially about Seville; yet it is a very rare occurrence in England.

To the few instances on record, we are enabled to add one shot at Sandwich in Kent, in the year 1805; unfortunately only the head and legs of this specimen were saved, and are now in our possession, giving a proof of the fact.

The bill is seven inches and a half long from the tip to the feathers on the forehead; and one inch three eights deep at the base; it is nearly straight, with the point of the upper mandible slightly bent downwards, and rather exceeding the other in length; the colour red: the length of the legs from the middle toe to the knee is a foot; from the knee to the joint of the thigh ten inches, six of which are bare of feathers, and all the bare part of this as well as the legs are scaly; the toes are connected with a strong scaly membrane, the middle toe to the outer as far as the second joint, and to the inner as far as the first joint: claws extremely short and blunt.

Another Stork was shot in Hampshire, in the autumn of 1808, by the game-keeper belonging to Major Guiton. The Major had seen the bird in the morning, and shot at it, without effect, being at too great a distance: in the evening it was observed by the keeper, perched upon the top of a house, where it was shot. The same bird (probably) had been noticed by some husband-men, several times for the preceding fortnight, contiguous to the place where it was shot

STORM-COCK. Vide Throstle and Thrush-missel.
STRANY. Vide Guillemot-foolish.
STRAWSMEER. Vide Wren-yellow.
SWABIE. Vide Gull-great-black-backed.
SWALLOW-CAR. Vide Tern-black.
SWALLOW-CHIMNEY. Hirundo rustica.
Bewick Br. Birds, i. t. p. 261.

The Swallow, like other migrative birds varies a little in the time of its appearance and disappearance; actuated wholly by the influence of season, the temperature of the atmosphere directs it when to proceed on its journey, and when to stop. It is the present sensations that influence their actions, for if the weather is mild, with a south or south-west wind, early in April, for a few days, Swallows and Martins appear. So in the autumn, if the weather is mild, from the middle of October to the middle of November, some continue with us much later than otherwise. If at these periods the weather suddenly changes to the other extreme, numbers perish for want of food. On the 5th of November, in the year 1805, we observed some hundreds of Swallows and Martins flying about in search of food, as active as in Midsummer, but the whole of their time was occupied in collecting a scanty daily subsistance, for the wind had been easterly, with boisterous and wet weather, for a fortnight preceding; so that being too weak to migrate, a great many perished, or were killed, being so reduced as to be incapacitated for flight. In one instance a dozen or more were taken from a malt-kiln where they had taken shelter; some were dead, others dying, and yet a little food was found in their gizzard. Those who had discovered a more than usual sheltered situation, and were able to collect sufficient food, survived the bad weather, and continued with us (in Devonshire) till after the middle of November, when, by a little milder weather, they recruited their strength sufficient for a voyage to the continent, where every

every hour would bring them a degree or two nearer to their winter quarters, and food as rapidly increases.

On the 19th of November of the same year, we observed the last Swallow; and in no one instance had we ever before seen any of this tribe so late; but in the Monthly Magazine for March 1808, Mr. Greig declares, that he saw between thirty and forty Swallows, flying across Wansworth common, in a South-west direction on the ninth of last December.

Mr. Bewick relates an excellent account of the experiments of a Mr. Pearson on Swallows, with a view to obtain facts with respect to the absurd obsolete opinions concerning their winter torpidity and submersion. The result of many years confinement of these birds, was, that at no time of the year did they indicate the smallest tendency to torpidity, much less to creep into an element, which from their conformation would prove an everlasting sleep. This gentleman concludes his account by observing, "I have now, Jan. 20th, 1797, in my house, Great Newport-street, Long-Acre, four Swallows, in moult, in as perfect health as any birds ever appear to be in when moulting." Those who wish to be informed of Mr. Pearson's treatment of these birds, in order to keep them in health for three or four years, may obtain instruction, by consulting *Bewick's British Birds*, where a full account is detailed.

At present, we shall leave further accounts of the natural history of this and other similar birds, for another place, where the subject of migration will be considered at large.

SWALLOW-HOUSE. Vide Swallow-chimney.

SWALLOW-SAND. Vide Martin-sand

SWALLOW-WINDOW. Vide Martin.

SWAN-HOOPING. Vide Swan whistling.

SWAN-WHISTLING.

Lath. Syn. Sup. ii. p. 341.

Lin. Trans. iv. p. 105. t. 12. f. 12. (trachea).
Bewick Br. Birds, ii. p. 272.

Doctor Latham, on the authority of Doctor Maton, considers the Whistling-Swan as indigenous to Dorsetshire. The latter gentleman, in his *Western Tour*, remarks, that he saw them on the east side of the Chesil Bank in August. This is extremely early for the appearance of this species on our coast, and had we not such authority, we should be inclined to suppose there was some mistake, especially as the Mute Swan is perhaps in greater abundance in the same neighbourhood than in any part of England. It is possible, however, that a wounded bird of this species, incapable of migrating to the arctic regions to breed, might have induced its mate to remain also; and these might find security amongst the great quantity of the mute species. Such an accident only, would we think, prevent the vernal migration of the Whistling-Swan.

Abbotsbury, in Dorsetshire, has been long famous for a large Swanery, at present much reduced, there not being above six or seven hundred, whereas we are told that formerly there were as many thousands. The present proprietor of these birds is Lord Ilchester.

Many ridiculous stories have been told of the great strength a Swan possesses in his wings, and how dangerous it is to approach the nest of this bird, for a blow from its wing has been known to fracture a man's thigh. It is high time such absurdities should be erased in this philosophical age; and that the mind of man should reason before he continues to relate such accounts, only calculated to frighten children. Let the bones of the wing of the Swan be examined, and compared with that of the thigh of a man, or even of his arm; (for it is well known the size and strength of muscles are in proportion to the size of the bone) and it will be evident, that it would be as impossible for a Swan to break

a

a man's arms, as it would be to break his head with a reed. The bone of a man's arm would bear a weight or pressure fifty times as great as the bone of a Swan's wing; how then is the inferior in size and strength to break the superior without at least being itself fractured?

The pectoral muscles of all birds are proportionably stronger than the same muscles in the human frame weight for weight; but their bones on account of their necessary levity are thin, tubular, and consequently brittle, and ill calculated for partial concussion, though admirably suited for general and equal pressure against the yielding atmosphere. It should also be recollected that a bird is incapable of striking with any degree of force while all his quill feathers are perfect, the resistance of the air against such a surface being too great to allow of its moving with sufficient velocity to inflict any sensible pain: to give the greatest impetus, the feathers should be cut short, as in the game Cock trimmed for fighting, the power of whose wings is greatly augmented by such a reduction of surface.

When we have taken a Swan by the wing, we felt no uneasiness for the safety of our own arms, but greatly alarmed for fear in the struggle we might break the wing of the Swan: and we are quite convinced that the face alone need be guarded against the pinion of any such bird.

The more enlightened part of our readers will pardon this digression, if such it can be called, as it must be their wish as much as ours to find such nursery stories abolished from the pages of natural history.

Those, who like Buffon, can suppose that the Tame or Mute Swan is descended from the Whistling species, (improperly called the Wild Swan,) should consult the internal structure of the two birds, as well as the external appearance, and their notes; and with such a knowledge all doubts will cease.

The singular flexure in the *trachea* of this species has long been known to mark a strong distinction, a very good figure of which may be consulted in vol. iv. of the Transactions of the Linnœan Society, shewing the cavity in the keel of the breast bone, into which it is received, and its returning to enter the chest or thorax, in order to communicate with the lungs. At the time that paper on the *trachea* of birds was written, it was not known that there was any sexual difference in the structure and situation of the *trachea;* nor do we believe, that any writer has noticed the very great dissimilarity of this part in the two sexes. The figure referred to, represents a section of the keel of the breast bone of the female, shewing the flexure of the *trachea* in its cavity, which usually enters about two inches and a half, or three inches at furthest, and then returns, there being no excavation in the bone beyond. On the contrary, in the male, the *trachea* extends down the cavity of the keel, and afterwards enters the breast bone, where there is no longer room at the posterior part of the keel, and there the flexure is constrained to change its direction from a vertical to a horizontal position, becoming orbicular, by being greatly extended laterally, and filling up the whole of the lower part of the breast bone quite down to the *sternum.* Thus the lower part of the cavity that receives the *trachea* is very convex on the inside, and the bone so extremely thin and membranaceous, that through it the flexuous course of the *trachea* is easily defined. The lower part of the keel of the breast bone, where the *trachea* turns, in order to take a horizontal direction, is much broader than in the female, although the specimen from which this description is taken, is a male of the first year, in its brown plumage, and the *trachea* is not above two-thirds of the size of that of the old female, (with which we have compared it) at the part which returns from the keel and enters the thorax; and from the comparison of the other parts, we are inclined

to

to believe that part will even in maturity be found smaller in the male, in order to be better accommodated, where it takes the horizontal flexure in the thin part of the breast-bone.

The *branchi*, however, are larger, and the bony part at the lower extremity of the *trachea*, to which the branchial tubes are attached is not so much compressed. As the *trachea* of the male goes down to the end of the breast-bone, which in this young bird is full six inches; and in the old female, it only enters at farthest three inches, it is evident, that there must be at least, six inches difference in the length of the *trachea* between the sexes, independent of what may be occasioned by the natural superiority of size in the adult male. Several species of birds have a lengthened and flexuous *trachea*, and amongst the British, the Wood Grous, the Spoonbill, and the Crane, but the latter is the only one besides the Swan, that has hitherto been observed to have the *trachea* enter a cavity in the breast-bone.

We must not omit in this place, to remark a circumstance, that clearly shews what nature will perform, in order to restore her works that have been deranged by accident. A wounded Swan was sent to us by the same kind friend from whom the other living specimen was received; but this unfortunate creature had a most complicated fracture in the bone of the wing, near the body. It lived for about four months, fed heartily till within a short time of its death, and at that period the wound in the wing certainly did not affect its health; but it never got up in flesh, and the direct occasion of its decease appeared to be a flux. Curious to know what nature had done with the fractured bone, the wound was examined, and we found a large fragment of the *os humeri*, about an inch in length, still projecting through the skin, but which was surrounded by a callous, like a tooth in its socket, that protected the flesh from its sharp and ragged edges. When this was removed, we found, that about an inch of the remain-

ing stump of the *os humeri* attached to the *ulna* and *radius* of the fore wing had deflected, and the joint become nearly motionless ; but what surprised us most, was, the commencement of a new joint forming at the fractured part. The joint had greatly enlarged, and had shot out strong cartilages to unite with the fractured end of the interior part of the *os humeri*, the point of which was also enlarged and closed. An union was thus formed at the lower part, and the commencement of a socket in one, to receive the head of the other was evident, and a motion was obtained upon these points of contact, and no doubt a rude joint properly inosculated, would have been formed, so soon as the large splinter had been removed, and which in a little time would have been naturally effected, for it had risen considerably by the pressure of the enlarged joint. Upon a further dissection of the body, a bullet, the size of a pea (the same probably which had fractured the wing) was found to have entered the flesh on the same side of the body, and lodged between the ribs. Within the body, in the direction of the bullet, a large unnatural substance of the size and figure of a hen's egg, and of the colour of liver, was observed between the liver and the gizzard. This was doubtless formed by the extravasated blood caused by the contusion, and had not been taken up by the absorbent vessels. This oval body was enveloped in a membrane, and was attached to both the liver and the gizzard, by an extension of its surrounding membrane, and by that means held in one place. It was tender, fragile, and more dry in its consistence than liver, though similar in colour when first divided by the knife, but by its rapid absorption of oxygen, on exposing the interior part to the air, it became in a few minutes of a bright red ; a circumstance that proves its sanguineous property, as blood is known to powerfully attract oxygen, and by its chemical union the change of colour to a bright red is effected. It is an extraordinary circumstance, that so large a portion of coagulated blood

should

should have preserved its living principle without vessels, so generally necessary for the support of vitality: but as it had retained the vital spark for four months, there can be no reason for supposing it would have vanished, but with the life of the animal. After this body had been exposed some days to the air, it became putrid like all other animal matter, divested of its vital principle. Hence we may infer, that blood, or the circulating fluid of an animal, retains in itself a large portion of that which is its office to convey to the system in support of life; and that under certain circumstances, it is perhaps the only animal matter capable of retaining vitality without organization, or in other words, that is not corruptible under similar circumstances.

Besides the double flexure in the *trachea*, and the large cavity in the keel of the breast-bone for its reception, in this species, another singular and specific character has lately been discovered, not before noticed we believe. This is a small corneous spur at the end of the *alula spuria*; it is about half an inch long, and a little arcuated. To the ingenious Mr. Henry Boys we are indebted for the first notice of this circumstance, and have since observed it in a Swan of the first year, as well as in the older birds; but it is not easily discernible amongst the feathers, though sufficiently conspicuous when they are removed.

The Australacian Cassowary has a similar spur at the extremity of its diminitive useless wing.

A female Whistling Swan shot near Bridgewater, in the year 1805, got the better of her wound, and was kept by Mr. Stone, with his Geese for nearly two years, during which time she laid one egg: and we here beg leave to record our public acknowledgement to that gentleman for his politeness in presenting to us both the bird and the egg. But we must at the same time acknowledge, that much is due to the kind assistance of Mr. Anstice, at whose instigation this acceptable present was made.

This

This beautiful and docile bird is now alive and in high health, living with many other sorts of Ducks in the greatest harmony. Towards the spring she becomes more clamorous, and impatient of confinement; but at all times will approach those persons in the habit of feeding her, and will take food from the hand, at the same time uttering those plaintive and harmonious notes, for which the species have been remarkable, and which is always attended with a singular jerk of the head. She usually carries her neck straight and erect, either upon the water or when stationary on land; but in walking the head is lowered and the neck reclining over the back. In the season of love she frequently flaps along the surface of the water, and would undoubtedly fly, if the precaution of annually cutting the feathers of one wing was omitted, for whatever might have been the wound that was the cause of captivity, nature has performed a perfect cure. Her nature is gentle, timid, and sociable; will follow those with whom she is acquainted from one side of the menagerie to the other, especially ladies of the family dressed in white: is often turned out of her course by a pugnaceous male Shieldrake, and acts only offensively when food is the object, and then only where resentment is not expected. She eats but little grass on land, but will devour aquatic plants occasionally; barley, however, is her principal food, and she never attempts to touch bread which is sometimes thrown to other birds; nor will she devour small fish, which some of the diving Ducks greedily eat.

The base of the bill in this specimen is as usual in adults, of a bright yellow.

Whether from age or what other cause has not been ascertained, but the Swan differs materially in the colour of its irides; in some they are pale yellow, in others dusky. It is evidently not a sexual distinction, since we have noticed both sexes with dark irides. If it is the effect of age, it is difficult

difficult to determine at what age the iris becomes pale, since the live Swan in our possession, whose irides are dusky, has never made any change in that part since it was taken, eight years since, and the bird was then matured, although its age could not be known.

The egg is very small in proportion to the bird, being not near so large as that of a China Goose, and is regularly oval; about three inches long, and of a ferruginous colour, with some white blotches about the middle, appearing as if artificially stained.

The young of this species are brown in their plumage for the first year; one which we examined on the sixth of March, 1809, and which measured three feet eight inches in length, and weighed eight pounds and a quarter, had the bill flesh-colour at the base: irides dusky. The feathers on the forehead and before the eyes, dull-orange; the rest of the head and upper neck behind, brown: the under parts white, tinged with rufous: the lower neck behind, the upper parts of the body, scapulars, coverts, and tail, cinereous-grey.

SWART-BACK. Vide Gull-great-black-backed.

TANG-WHAAP. Vide Whimbrel.

TARNEY. Vide Tern-common.

TARRACK or TARRET. Vide Tern-common.

TEAL. Anas Crecca.

Lath. Syn. Sup. ii. p. 360

Lin. Trans. iv. p. 108. t. 13. f. 1. (trachea)

Bewick Br. Birds, ii. t. p. 376.

The labyrinth at the bottom of the *trachea* of the Teal, is very small, of a bony texture, but very thin, and of a sub-orbicular shape about the size of a pea.

TEAL-AFRICAN.

Anas Africana, Gmel. Syst. i. p. 529.—Ind. Orn. ii. p. 876

Sarcell-

Sarcelle d'Egypte, Buf. ix. p. 273.—Pl. Enl. 1000.
African Teal, Lath. Syn. vi. p. 555.

There appears much reason for believing, that this and the Nyroca Duck are varieties of the same species, and which it will be seen in the preceding pages, were considered as differing only in sex from the Ferruginous Duck of Mr. Pennant. We are assured that several of the Nyroca have been lately bought in London.

TEAL-CRICKET. Vide Garganey.
TEETING. Vide Lark-tit.
TEE-WHAAP. Vide Lapwing.
TEEWIT or TEUCHIT. Vide Lapwing.
TERN-BLACK.

Sterna fissipes and nigra, Lin. Syst.
Nigra, Ind. Orn. ii. p. 810.
Black Tern, Lath. Syn. vi. p. 367. A.
Bewick Br. Birds, ii. p. 203.
Lesser Sea-Swallow, Albin, ii. t. 89.

PROVINCIAL.

Stern. Car-Swallow.

The whole tribe of the Terns generally leave this country before the middle of October, but we obtained a specimen of this bird, the beginning of November, 1802, in Devonshire, it was a young bird, we may conclude from the plumage.

The head was mottled with black and white; the back and scapulars brown and grey; dusky at the setting on of the wings and the ridge: the neck almost white, both behind and before; the under-parts of the bird mostly white, except a little patch of black on the breast; quills dusky-grey; tail paler-grey

The sterna *nigra* of Linnœus is without doubt, only a variety

variety of *fissipes*, and has been thought so by others, though lately made distinct without sufficient reason. The bird here described, will shew the propriety of bringing all the synonyms of *sterna nigra* together, with those of *fissipes*.

It is remarkable that the under parts of this bird when young, or in its first plumage, should be white, so contrary to that of the Gull genus, which never become white in those parts till after the first, and some not till the third or fourth moult. The black on the under parts of this species does not appear till after the first moulting.

In the breeding season, both sexes of this species have the head, neck, and all the under parts as far as the vent, entirely black, with now and then a few white feathers at the base of the upper mandible: the legs dusky, with a tinge of red.

We observed great abundance of Black Terns on the fens of Lincolnshire during the breeding season, and could not discern any difference in plumage between the sexes: many that had no white on the head were opened, and males as well as females ascertained.

About the middle of May this species prepares a nest of flags or broad grass in the most marshy places, upon a tuft just above the surface of the water; and lays almost invariably four eggs, weighing about three drams each.

The flight of the Black Tern is not very unlike that of the Goatsucker; its evolutions are rapid, and its turns short, by which means it sometimes escapes the talons of predaceous birds, as we had once an opportunity of witnessing. In a very hard gale of wind many Terns were sporting over the water, when a Peregrine Falcon passed like a shot, singled out his bird, and presently coming up with the chace, made a pounce, but the great dexterity of the Tern avoided the deadly stroke, and took a new direction. The Falcon, by his superior velocity, soon regained sufficient elevation, to successively repeat his pounces, but at last relinquished the pursuit.

TERN-BROWN.

In the second Supplement to the *General Synopsis*, the synonyms of *Sterna obscura* have been affixed to a species of *Larus*, under the title of Brown-Gull. This Gull we have before shewn is not a distinct species, but the young of the Black-headed-Gull, to which we beg leave to refer. With respect to the Brown Tern of Ray, it ever has, and ever will be in obscurity; but there cannot be the least doubt that it is one of the Terns in its immature plumage, most likely the common species *Sterna Hirundo*, which is at first brown above, and the tail scarcely forked. See the last species and the following.

Upon the subject of this, and the Brown-Gull, we have been more diffuse under the article Black-headed-Gull, both in this work, and in vol. vii. of the *Transactions* of the *Linnean Society*, to which we refer the curious reader.

TERN-COMMON.

Sterna Hirundo Lin. Syst.
Nœvia, Lin. Syst. i. p. 228.
Gmel. Syst. i. p. 609.
Bris. vi. p. 216.—6. t. 20. f. 2.
Id. 8vo. ii. p. 418.
Sterna Boysii, Ind. Orn. p. 806. B.
La Guifette, Buf. viii. p. 339.—Pl. Enl. 924.
Sandwich Tern, Lath. Syn. vi. p. 358. A.
Clovenfooted Gull, Albin, ii. t. 82.
Kamtschatkan Tern. Arct. Zool. ii. p. 525.
Phil. Trans. lxii. p. 421.
Bewick Br. Birds, ii. p. 207.
Common Tern. Bewick Br. Birds, t. p. 199.

PROVINCIAL.

Kirmew, Picket, Tarney, or Pictarne, Tarrack, or Tarret, Rittock, or Rippock, Spurre, Scraye.

Several

Several young birds of this species, were sent to us by our late friend Mr. Bryer, of Weymouth, which had the head partly black; the back mottled with brown; the wings partly brown, intermixed with ash-colour; and the under parts white, with the tail nearly even at the end.

A specimen from Senegal, in Africa, in the collection of Mr. Vaughan, corresponds partly with the above in plumage, and is, without doubt, of the same species, but farther advanced, being a medium between this and one hereafter described.

It will be observed by the critical Ornithologist, that this species in its first or nestling feathers, so nearly answers the description given of the Brown Tern, that we think their synonyms should be inseparable.

It is unfortunate for science when obscure accounts are handed down to posterity, by respectable authors who claim no small share of deference. But here it does not appear that Mr. Ray ever had seen the bird he denominated *Sterna fusca*, but that the short account of the bird was communicated to him by a friend, the Rev. Mr. Johnson, vicar of Brignal, in Yorkshire, who died in the year 1695; so that it is high time this ambiguous bird should be identified in the young of the Common Tern above described.

Mr. H. Boys assures us this species is common in Scotland especially in the isle of May, in the Frith of Forth, where it is called Pictarne; and where it is esteemed a good relish when split and broiled; and their eggs excellent when boiled hard and eaten cold.

Extends to the Orkney and Zetland Islands, where we are assured by Mr. Fleming they are known by the several names of Tarrock, Tarrick or Tarret, Rittock or Rippock.

The plumage of the Terns, like that of the Gulls, differs so much between the infant and adult state, that it is extremely difficult to assign to each their proper synonyms: indeed so

perplexing

perplexing is the genus from this circumstance, and so much confusion has arisen from it, that it will scarcely ever be possible to bring them into their proper places; some which are actually distinct have been confounded, while, without doubt, many varieties of others have been described as distinct species. In this place, however, it is only our business to elucidate the subject as far as relates to British species.

Amongst the obscure *Sterna*, that of the Linnœan *nævia* particularly claims our attention here, because we have no doubt that it is really belonging to this species, and it is no other than the *Hirundo* of Linnœus in the state of adolescence.

Buffon has also described a bird under the title of *Guifette*, figured in the *Planches Enlumine*, and which is now with great reason considered as the Linnœan *nævia*; but we cannot agree with our friend Doctor Latham, and others, in considering these birds as varieties of the Sandwich Tern, *Sterna Boysii*: the vast disproportion of size at once forbids it. Buffon's bird is said to be a middle size between the Lesser Tern *Sterna minuta*, and Common Tern *Sterna Hirundo*. The Linnœan bird is described to be eleven inches and a half in length: which is also a medium between the two last mentioned species, and greatly inferior to the Sandwich Tern, which measures eighteen inches: and we cannot suppose that these could have been brought together on any other account than that of the bill and legs being dark-coloured.

Mr. Pennant, in the *Arctic Zoology*, describes his Kamtschatkan Tern, to have the bill and crown black, forehead and space over the eye white: and says, "a bird, seemingly of this species, was shot on the Severn, a few miles below Shrewsbury, and it is among the elegant drawings of my friend Joseph Plymly, Esq. of Longnor." For this supposed species, Mr. Pennant refers with great reason, to the *Guifette* of Buffon, figured in the *Planches Enlumine*.

This

This is without doubt, the same bird as Doctor Foster mentions, as a variety of the Common Tern, found at Hudson's Bay, having the legs black, and the tail shorter and less forked.

In the year 1802, on the 2d of September, a Tern was shot near Bath, as it was flying about the Avon; a sketch of which we were favoured with, by the late Mr. Robins of that place, accompanied with the following short description:

"The weight was three ounces; the length twelve inches; breadth twenty-seven and a half. The bill, legs, and feet black, in other respects much like the Common Tern."

We have no doubt that had Mr. Robins, carefully compared this bird with the *Sterna Hirundo* in the adult plumage, he would have observed that it differed from it, in possessing the white forehead, and also in other parts of the plumage. But from all these accounts, though imperfect, we are quite clear, that the bird in question is now before us, and that it is, without doubt, the *Sterna Hirundo* in the adolescent state of plumage; of which the following is a description.

Length nearly twelve inches: the bill dusky-black, rather exceeding an inch in length to the feathers on the forehead, shaped like that of the Common Tern: irides dusky: the forehead is white, the top of the head the same, streaked with black, by being intermixed with black feathers; the back of the head, taking in the eyes and extending down part of the neck behind, black, like that of the adult; before the eye the feathers are streaked as on the crown, but close to the orbit is a full black line, extending half-way round it; the hinder half close to the orbit is white: the back and sides of the neck, and whole under parts white: the back is cinereous like the adult, but differs in having the margins paler: the scapulars the same, with dusky-brown borders, tipped like the last; the longest of these feathers that reach over the rump are tipped with

with white: the lesser coverts of the wings, from the ridge, are dusky-black, with pale margins, becoming gradually lighter, till the two largest series of coverts are cinereous, with pale margins like the back: all the quills are cinereous, rather darker than in the adult, the primaries darkest, or what has been termed blue-grey, and slightly tipped with white; the tertials have a brown tinge: the tail is less forked than in the adult, and white, with the outer webs of the three exterior feathers more or less of the same colour as the primary quills: the legs and feet dusky-black, but like the bill possess a rufous tinge: the wings exceed the tail in length rather more than those of the adult, because the lateral tail feathers have not acquired their full length.

This, and other similar birds were shot in the month of November, on the south coast of Devon; and we think there can be no doubt that it is the Buffonian, as well as the Linnæan bird referred to; and there is as little doubt that it is also the *Sterna Hirundo* immaturely feathered, but further advanced than that state in which we conceive the same species has been described under the title of *Sterna obscura*. The appearance of this bird is infantine; the light margins of the feathers are characteristic marks of immaturity, observable in almost every species of birds, and well exemplified in the whole race of Gulls, which has till lately caused such perplexity in that genus.

With respect to the habits of the *Guifette* of Buffon, we have no doubt he was deceived by those who gave him the information, or at least the habits of the *Hirundo* must be very different in Picardy, than in Sussex and Kent, the opposite coast, and at no great distance from each other. It is therefore probable, the manners of *Sterna fissipes*, have been confounded with this, when the *Guifette* is said to make a nest in the marshes on a tuft of grass or moss.

Such habits are peculiar to the *fissipes* or Black Tern, and

we

Gull-billed Tern

we believe to no other European species. It is however, not the first time we have discovered where that great naturalist has been deceived.

It will be observed, that in the former part of this work, we had prefixed all the synonyms of the Linnœan *nævia* to the Sandwich Tern, upon the authority of the *Index Ornithologicus;* but it must be evident, that the disproportion of size is so great, as to preclude all possibility of their being the same species. Having now the good fortune to identify the Buffonian *Guiffette*, and which has been, with great probability, considered to be the Linnœan *nævia*, we beg those synonyms attached to the Sandwich Tern, as a variety, may be cancelled, having brought them to this species; and we request, that these may be added to those already innumerated in the former part of the history of *Sterna Hirundo* or Common Tern.

TERN-GULL-BILLED. Sterna Anglica.

As we have in some of the preceding Terns been reducing the species, so we trust it will clearly appear that there are two very distinct species confounded for the Sandwich Tern.

Before we enter into a comparative definition of the two species, it will be proper to remark, that amongst several birds which Doctor Latham spared to Mr. Vaughan from his collection, we recognized the original Sandwich Tern, from which the drawing was taken by the daughter of the Doctor, and afterwards engraved for Mr. Boys's *History of Sandwich*. This identical bird was sent by Mr. Boys to Doctor Latham, as a new species, and as such was denominated Sandwich Tern in the *General Synopsis*, and afterwards in the *Index Ornithologicus*, *Sterna Boysii*, making it known by those appropriate names, the original discoverer, and the place where found. Doctor Latham assures us he never had but two Sandwich Terns, the one sent to him by Mr. Boys,

and the other by Doctor Leith of Greenwich, and that they were similar. The specimen, however, before mentioned, is evidently the one from which the original drawing and description were taken, as the attitude evinces. This specimen having been presented to us by our friend Mr. Vaughan, has been the occasion of the fortunate discovery, that a distinct species, apparently more common, has been erroneously considered to be that bird; an error we confess to have fallen into, in common with all other Naturalists.

From the general resemblance of these two species, it is probable that the one in question would have long remained confounded, had it not been for the means of bringing the two together, (being in possession of the new species) which, from the shape of the bill, is denominated the Gull-billed Tern, a prominent character of distinction between the two: and as it has originated in England we have added the more scientific name of *Sterna Anglica*.

Our specimen of this species we shot in Sussex, and have known others to have been killed about Rye. Two of these birds are in the collection of Mr. Vaughan, both sent to him for the Sandwich Tern.

Now, in order to define the distinction of these two species, we shall make a comparative description.

The bill of the *Boysii* is two inches long, slender, and almost regularly subulate, and is black, with a pale horn-coloured tip. That of the *Anglica* is not above an inch and a half long, thick, strong, and angulated on the under mandible like the bill of a Gull, and wholly black: upper part of the head of the *Boysii* is black, spotted with white on the forehead and part of the crown. In the *Anglica* the upper part of the head, taking in the eyes, is also black, and extends much farther down the back of the head and part of the neck; and in the several specimens examined there has been only two or three white feathers on the crown. The

upper

upper parts of the body of the former are of a paler grey, or as Doctor Latham terms it, hoary lead-colour; and the tail, as well as their upper coverts quite white. The general plumage of the *Anglica* above is darker, being cinereous, and the tail and its upper coverts like the back, the outer feather on each side only being white. The greater quills of the *Boysii* are hoary black on the outer webs, and more than half of the inner, near the shafts, from the points, but gradually becoming less towards the base, the shafts and interior margins quite to the tip white.

In the *Anglica* the quills are hoary, but the tips of the first five are black, for an inch or more, without the smallest margin of white on that part; in other respects the wings are somewhat similar, except that part of the inner webs which is white, does not quite reach the margin, the very edge being dusky for half the length of the feathers.

In their legs and feet there is as great a difference as in their bills; the legs of the *Boysii* are nearly one third shorter, black with a slight rufous tinge, measuring scarcely one inch and a half in the *tibiæ*; the foot is small, and the claws remarkably hooked. The legs of the *Anglica* rather exceed two inches in length from the heel to the knee, their colour rufous-black; the toes longer than in the other species, especially the middle toe; and the claws unusually straight.

It will be observed, that in the former part of this work, this species was described for the Sandwich Tern, from a specimen in our possession, having been like others led into the error for want of comparison: but the instant we had an opportunity of bringing the two birds together, the distinction was evident. The bill and legs alone are so pointedly characteristic, that at first sight the species may now be determined, independent of plumage. The size of the two species are nearly the same, but the Sandwich is a longer bird, being about eighteen inches in length, and two feet nine inches in breadth.

TERN-LESSER. Sterna minuta.
Bewick Br. Birds, ii t. p. 201.

The very great difference in the plumage of this species between the nestling and the adult, will shew the necessity of great caution in ascertaining the several species of the genus.

The young are seldom capable of flying till the first or second week in July; at which time the plumage of the upper part is more or less of a pale yellow-brown, intermixed with cinereous; and on the back and scapulars each feather has an angular bar near the end; on the back of the head the feathers are black tipped with grey: the quill feathers are of an elegant cinereous grey, white at the edges, and slightly tipped with yellowish-brown: the tail is nearly even at the end, almost white, with a dash of cinereous; in the middle of each feather a dusky spot on each web, and the tips yellowish: the whole under parts white, the bill dusky, tinged with yellow: legs dull-yellow.

This species is not considered so plentiful as the *Sterna Hirundo*, but in some places it is extremely common: on the coast of Lincolnshire it appears to exceed the other in number, especially about Skegness. At that place we sometimes observed three eggs together, for they make no nest. The weight of the egg is from two drams forty grains, to three drams.

TERN-ROSEATE. Sterna Dougallii.

It will be seen, we have already given a new species of *sterna*, which has most commonly been confounded with the Sandwich Tern: and it may appear extraordinary, that another new species of this tribe should lately be discovered in this country.

To Dr. M'Dougall, of Glasgow, the amateurs of science are indebted for this valuable discovery, several of which were

ROSEATE TERN.

were shot in the west Highlands of Scotland, and of two preserved in that gentleman's collection, he was so obliging as to favour us with one of them, accompanied with a full description, taken upon the spot while the birds were fresh. Of this description, therefore, we shall give the substance as nearly as possible, occasionally introducing any thing that may have occurred to us upon examination.

Length fifteen inches and a half: the bill one inch five eighths long to the feathers on the forehead, slender, slightly curved, and of a jet black colour, except at the base, which is of a bright orange, extending about the eighth of an inch in breadth on the upper mandible from the corner of the mouth, round the front, and round the nostrils; and on the under mandible, extending from the angle of the mouth along the sides as far as the feathers on the chin, and rather beyond on the under part: the inside of the mouth and throat bright orange, becoming darker towards the end of the bill: irides black: the tongue one half the length of the bill, of a pale red colour, and bifurcated at the point: the forehead, crown, hind part, and sides of the head, taking in the eyes, except a small portion of the lower part of the orbit, jet black; the black feathers on the hind head thinly diffused, and flowing over the white down the back of the neck; the feathers on the sides of the head, extending in a narrow line along the upper mandible to the nostrils, and on the sides of the neck white: the whole under parts are white, but the fore-part of the neck, breast, and belly to beyond the vent, are tinged with a most delicate rosy blush: the back, scapulars, and coverts of the wings, pale cinereous-grey: the quill feathers are narrow, the first has the exterior web black, with a hoary tinge; the others are hoary on that part; and part of the inner web next to the shaft of the first three or four is hoary-black, becoming by degrees paler in the succeeding feathers, all deeply margined with white quite to the

tip, and the shafts of all are white: length of the wing from the elbow to the extremity of the first quill feather, nine inches and a quarter: the tail is greatly forked, the outer feather is seven inches long, extending two inches beyond the wings when closed, extremely slender, and the end for an inch or more slightly ciliated; the middle feathers are scarcely three inches in length, they are all white, destitute of any markings: the legs and feet, including the bare space above the knee, which is nearly half an inch, are of the brightest orange colour; the claws black and hooked.

Such is the description of this interesting species of Tern; but we must not withhold Doctor M'Dougall's very correct comparative observations, which we shall transcribe:

"This Tern is of a light and very elegant figure, differing from the *Sterna Hirundo* in the size, length, colour, and curviture of the bill; in the comparative shortness of the wing in proportion to the tail; in the purity of the whiteness of the tail, and the peculiar conformation and extraordinary length of the lateral feathers. It also differs from that bird in the length, colour, and size of the legs and feet.

"From the Sandwich Tern it differs essentially in the shortness of the wings in proportion to the tail, and completely in the colour of the legs and feet."

From these notes, which Doctor M'Dougall took upon the spot where the bird was killed, we might collect sufficient information to consider it as distinct from any of the known British species, although many of its characters are very similar to those of *Sterna Boysii*. With the *Sterna Hirundo* its principal and almost only similarity, is that of size, if any thing, rather inferior in bulk, but of greater length by reason of the extraordinary long feathers of the tail.

The length of the bill is not only rather superior, but is more subulate or slender, and not so much curved, independent of the difference in colour, as noticed in Doctor M'Dougall's

M'Dougall's remarks. With respect to the colour of the plumage, they are so essentially different, as to render it scarcely worth comparing; the upper parts of the *Hirundo* are much darker, and the under parts destitute of any roseate tinge: the quills are darker and longer, and have no margin of white near the end; and the tail is less forked, the feathers not white, but pale cinereous, with the outer feathers black on the exterior web.

With all the British species of *sterna* before us in several of their usual changes, we can have no difficulty in agreeing with Doctor M'Dougall, that his bird is distinct from either of those recorded as British, and we really believe is entirely a new species.

In plumage, shape of the bill, and general appearance, except in its very inferior size, it bears a great resemblance to the SandwichTern: but the colour of the bill and legs, as well as the extraordinary length of tail in this, would be sufficient marks of distinction, even if the size had not been so greatly different. The circumstance too of the Sandwich Tern possessing a tinge of blush on the feathers of the breast towards their base, though not apparent till they are lifted up, is another singular affinity in two species, which in some respects are widely distinct. We mention these circumstances, in order to guard such persons, who may fancy they know better than those who have strictly compared them, and hereafter suppose them as varieties. It will be recollected that in this tribe there is no distinction of sexes by size or plumage, though if any thing the males are rather the largest. Now the length of the Roseate Tern is only fifteen inches and a half, including the extraordinary length of tail, whereas the Sandwich Tern, with a much shorter tail, is eighteen inches in length, and the former is a male, which Doctor M'Dougall proved by dissection.

It may also be added, that the present subject was shot with

with many others, on the 24th of July, 1812, all of which are exactly alike. The season of the year, therefore, as well as the plumage, and sexual distinction, make it evident, that the bird is in its fullest maturity, and consequently as distinct from the Sandwich Tern as the Rook is from the Raven, or the Lesser Black-backed from the Greater Black-backed Gull, and with more specific characters of distinction as have been noticed.

In a subsequent letter from Doctor M'Dougall, in reply to several queries with which we troubled him, concerning the habits of the bird, there are many remarks of great interest, as tending to discriminate the species from its congeners, even when on wing, and which we shall in substance relate.

The places of resort of the Roseate Tern, are two small flat rocky islands, in the Firth of Clyde, called Cumbrey islands, in Milford Bay. On these islands, the Common Tern swarms, so that the Doctor and his companions could scarcely step without treading upon the young birds or eggs; of the latter two were usually together, but sometimes as many as twenty, which bespeaks a congregate incubation. The first of the new species was shot by accident by one of the Doctor's companions, and happening to fall close to him on the rocks, he was attracted by the beautiful appearance of its breast, and immediately pointed out the peculiarity of the species, and requested the gentlemen who accompanied him to shoot others. Two more were procured, and several escaped wounded, for it was easy to perceive the difference between this and the Common Tern, even on wing. After having attentively examined the actions of the Roseate Tern, and its appearance when flying, the Doctor computes that there was not above one, in two hundred of the Common Tern, but that they were easily singled out by the sportsmen, amidst thousands of the other species from the following circumstances, which we give in the Doctor's own words, being highly illustrative of the distinction of the species: The

Sandwich Tern

"The new species was discerned by the comparative shortness of wing, whiteness of plumage, and by the elegance and comparative slowness of motion; sweeping along, or resting in the air almost immoveable, like some species of the Hawk; and from the size being considerably less than that of *Sterna Hirundo*."

From the continual alarm of these birds, by the presence of the Doctor and his companions on these little islands, neither the eggs nor the young of the Roseate Tern could be clearly ascertained; but several eggs were collected, that differ in size, colour, and shape.

It is more than probable, this bird will be found hereafter to congregate in other places, not remote from the longitudinal line in which it has been first discovered, but hitherto passed unnoticed amongst a host of the Common Tern.

We now beg leave to make our public acknowledgements to Doctor M'Dougall, for the very liberal and handsome manner in which the history of this interesting bird was communicated to us, and more particularly for the specimen that accompanied it; the actual inspection of which, enables us to bear record of it as a distinct species upon ocular evidence, if such could be wanting, in addition to the excellent history given by the Doctor. In our acknowledgement, we must also include Captain Laskey, by whom we were first made acquainted that such a bird had been taken by, and was in the collection of Doctor M'Dougall, to whom he kindly communicated our wishes to examine it.

Were all collectors of the works of nature equally liberal, how much more rapidly would knowledge increase upon us, but unfortunately for science, there are some who withhold the little information they could give.

TERN-SANDWICH. Sterna Boysii.

Bewick Br. Birds, ii. t. p. 204.

The

The ingenious Mr. Bewick has evidently traced this species of Tern to the coast of Northumberland. The figure alone which this author has given would have been sufficient to have identified the bird; but we also obtain some interesting observations.

"A pair of these birds, (says the Author) male and female, were shot on the Fern islands, on the coast of Northumberland, in July, 1802.

They measured two feet nine inches from tip to tip of the wings: the bills were tipped with yellow: the black feathers which capped and adorned their heads were elongated behind, forming a kind of peaked crest, which overhung the nape and hinder part of the neck: the feathers of the forepart of the neck and breast, when ruffled up, appeared delicately and faintly blushed with red. In other respects they corresponded so nearly with Mr. Latham's accurate description, that to attempt giving any other would be useless."

Thus while we have to lament the want of the complete habits of this species with respect to the nature and situation of its nest, and colour of the eggs, (which evidently might have been ascertained, since they breed on the islands before mentioned) yet we learn some essential characters. First, that the tip of the bill being of a light colour is an invariable character: Mr. Bewick says yellow, so that we may conclude ours is only faded to a pale horn-colour. Secondly, the blush of red observed on lifting up the feathers of the breast and forepart of the neck appears to be an essential character, for even our specimen, which must have been killed nearly thirty years, retains a slight degree of this blush colour, beneath the surface of the feathers, on those parts.

We have only now to observe that without doubt, this, and the Gull-billed Tern, both breed upon the coast of Britain, and we think, with great probability, differ from the other species.

species of Terns in the choice of place for the purpose of nidification, breeding upon rocky elevated parts, instead of the shores, just above high-water-mark. There is every reason for believing that one, or both of these birds breed on the coast of France, especially that of Bretagne, on the isles off Ushant, and the small isolated rocks and promontories in that neighbourhood, for the eggs, apparently belonging to a large species of Tern, have been given to us, that were taken on the Black Rock; and where the birds to which they belong, are in vast abundance, and are called by the British Sailors Boatswain-bird.

This subject has been mentioned before, under the article of Boatswain, and therefore we only notice it here in hopes of stimulating some persons who may have an opportunity to investigate this matter, and rescue it from obscurity.

TERRICK. Vide Tern-common.

TEWIT. Vide Lapwing.

THROSTLE. Turdus Musicus.

Bewick Br. Birds, i. t. p. 104.

This in some parts is called Grey-bird, and Storm-cock; the last name is also applied to the Missel Thrush.

The Throstle, like others, is subject to some accidental variety; one in our possession is of a dun-colour above; paler beneath, with the usual shaped spots of the same colour as the back.

THROSTLE-HEATH. Vide Ouzel-ring.

In the second Supplement to the *General Synopsis*, the Author remarks, that "in *Ray's Letters*, p. 137, a "bird is mentioned by the name of Heath Throstle, taken "from the *Epitome* of *Husbandry*, the author of which "first noticed it. Mr. Ray supposes it to be the Ring "Ouzel, as that bird is called Heath Throstle, in Craven."

Doctor

Doctor Latham adds—"Be this as it may, the late Mr. "Lewin shewed me a pair of Thrushes similar to the Song "Thrush in colour, but they were darker, and the tail "seemed rather shorter: they were shot near Dartford, in "Kent; I remember to have made some remarks upon these "birds at the time, but having mislaid them, I cannot "venture here to say more on the subject."

At present we have no reason to believe these birds of Mr. Lewin other than the common Throstle, rather darker in plumage than usual, or than he had before noticed; but this is a circumstance common to all when in full feather newly moulted, and is very conspicuous in the Throstle when compared with specimens killed and preserved at a different season.

THRUSH-MISSEL. Turdus viscivorus.
Bewick Br. Birds, i. p. 100.

The name of Storm-cock appears to be given both to this and the Throstle: the Missel is also called Holmscreech in some parts of Devonshire.

In defect of other food, the Missel and Throstle feed on the roots of plants, and on Ivy-berries, and by such means are able to subsist, while the Fieldfare and Redwing are starving in severe weather.

THRUSH-SCREECH. Vide Thrush Missel.

THRUSH-SOLITARY. Turdus solitarius.
Turdus solitarius, Ind. Orn. i. p. 345.—Gmel. Syst i. p. 834.
Passer solitarius, Raii. Syn. p. 66. 4.—Will. p. 140.
Merula solitaria, Briss. ii. p. 268. 30.—Id. 8vo. i. p. 233.
Le Merle solitaire, Buf. iii. p. 358.
Passera solitaria, Olin. uc. t. p. 114.—Klein. Av. p. 67. 11.
Turdus solitarius, Hasselq. Act. Ups. 1750. p. 21. Id. Voy. (ed. Angl.) p. 26.

Solitary

SOLITARY THRUSH.

Solitary Thrush, Lath. Syn. iii. p. 52.—Will. (Angl.) p. 191. t. 36. 37.

This species is about nine inches in length. The bill is dusky, nine tenths of an inch long to the feathers on the middle of the forehead, straight, except at the tip, where the upper mandible is a little deflected and projects beyond the lower; the base is rather broad, but there is scarcely any appearance of a notch at the end: the nostrils are placed at the base of the bill, and are partly covered by the feathers which come rather more forward on the sides than on the ridge of the bill. The general colour of the plumage is brown, the upper part and sides of the head, back, scapulars, rump, and upper tail-coverts plain, except the tips of the feathers on the back being paler, giving that part a slightly spotted appearance: the chin is sullied white: above and behind the eyes the feathers are paler than those adjacent: from the bill to the eye dusky: the feathers on the throat and neck beneath are pale yellowish brown at their tips, whitish at their base, which gives that part a mottled appearance: the upper part of the breast plain brown, but rather paler than the back; the sides under the wings nearly the same: the lower breast and belly down to the vent mottled, or streaked with brown and white, the middle of the feathers being of the former colour: the under tail-coverts pale brown, with a rufous tinge: the quills and greater coverts of the wings are brown, margined with rufous: the tail is a little forked, the feathers are brown, their margins tinged with rufous: the legs are rather long in proportion, strong, and with the toes and claws are of a yellowish-brown colour; the middle toe is closely connected to the outer as far as the first joint.

We are happy in being able to add this species to the catalogue of British Birds, upon the most indisputable authority. It is an elegant bird, not quite so large in the body

body, but as long as the Throstle. The head is remarkably small, and the crown almost straight with the bill, there being scarcely any elevation on the forehead, but formed like that of the Stare; this shape, together with a straight and proportionably long bill, gives the head a lengthened appearance: the legs are remarkably strong in proportion to the bulk of the bird, being larger than those of the Throstle: the *vibressæ* or bristles, between the base of the bill and the eye, are black, but short and not very conspicuous: the mouth is large, and opens as far back nearly as the hinder part of the eye.

The form of the Solitary Thrush greatly resembles that of the Stare, to which genus it seems as nearly allied as to that of the Thrush.

The bird here described was shot about the middle of June 1810, at Copgrove, in Yorkshire, the seat of the Rev. James Dalton, who obligingly sent it to us. The bird had originally been sent by Mr. Dalton to his brother, who was forming a collection, but who most liberally at Mr. Dalton's request, permitted it to be added to our collection. To both these gentlemen, therefore, we beg leave to return our public acknowledgements,

We can find nothing described, to which this bird so nearly approaches, as the female *Turdus solitarius;* we, therefore, venture to give it as a trifling variety of that species, and are happy to have the concurrence of our friend, and able ornithologist, Doctor Latham, in this opinion.

The Solitary Thrush is described as common in France, Italy, and in the islands of the Mediterranean, and Archipelago; and yet neither Buffon nor Brisson, appear to have given a figure of it. *Le Merle Solitaire*, figured in Planc. Enl. 250, appears to be the female of *Turdus Cyanus*. Dr. Latham concludes, that it has rarely been brought to this country, as he never saw but one, and that was in the late *Leverian Museum*.

It

It is said to frequent mountainous and rocky places, and to be always seen alone, except in the breeding season. Like the Stare it prepares its nest in old ruined edifices, church towers, and other similar places, and lays five or six eggs; but two nests are never found near the same place. The young are easily brought up, and repay the trouble by their sweet native song; they may be also taught to whistle, and articulate words. When confined this species sings as well by candle-light as by day. Its food is principally insects, grapes, and other fruit. It is observed to change its abode with the seasons, coming into those parts where it usually breeds, in April, and retiring in August.

The specimen here described was solitary, and attracted the servant of Mr. Dalton by its singular cry. It was sitting on the ground in a meadow, and suffered the man to approach it without fear, and in that situation it was shot. The colour of the irides was not noticed, (those of the Solitary Thrush are said to be reddish) but upon dissection for preserving, two enlarged eggs were discovered.

Mr. Anstice (an accurate observer of objects in natural history) noticed a bird near Bridgewater, in the summer of 1811, that from his description appears to be of this species. He was very near to it as it was running in the road, and had the advantage of a telescope with which he examined it, and therefore was perfectly clear that the bird was new to him.

TIRMA. Vide Oyster-catcher.

TITMOUSE-BEARDED.

In a recent edition of Pennant's *British Zoology*, we observe, that by some unaccountable mistake, our description of the nest and egg of the Long-tailed Titmouse, has in a marginal note been transferred to this species. We, therefore, take this opportunity of correcting the error, as we still consider that part of the natural history of the Bearded Titmouse

mouse to be in great obscurity, and should be much obliged for any authentic information upon that head.

The necessity of noticing this little error, is obviously that of a rigid regard for science.

TITMOUSE-BLUE. Parus cæruleus.

Nat. Miscel. t. 138.

Bewick Br. Birds, i. t. p. 248.

PROVINCIAL.

Blue-cap, Titmal, Tinnock, Willow-biter.

TITMOUSE-COLE. Parus ater.

Least any spark of scepticism should still exist, with respect to the distinction between this and the March Titmouse, *Parus palustris*, it may be proper to remark, that we have repeatedly taken the nests of both species, and have invariably noticed the distinction of the conspicuous white spot on the head of both sexes of the *ater ;* and in no instance had either sex of the *palustris* that mark.

Last summer, a pair of these birds had taken possession of a hole in the garden wall, which gave an opportunity of examining both the old birds and the young, and we observed that all the young had the appearance of the mark on the head before they could fly, but not so pure a white as in the adults. These were put into a cage, and were fed by the old birds ; and it was noticed, that their principal food was little green caterpillars.

TITMOUSE-CRESTED. Parus cristatus.

Lath. Syn. Sup. ii. p. 255.

In the work referred to, the Author says, " We have heard " of this species being plentiful in some parts of Scotland, " especially in the Pine forests, from whence I have received " a specimen, now in my possession. TITMOUSE-

TITMOUSE-LONG-TAILED. Parus caudatus.
Bewick Br. Birds, 1. t. p. 251.

In the month of July we observed a brood of these birds, consisting of about twelve, to constantly frequent a small plantation to roost, for a long time after they quitted their nest. Just as it became dusk in the evening they were apparently extremely restless; but by a singular note uttered by one, and as instantaneously repeated by the whole, they assembled in a moment, and huddled so close together on a branch as to appear like a ball of down. This assemblage in close contact during the night is probably common to most of the smaller birds for a long time after they leave their nest; for we have observed the same nocturnal attachment in young birds brought up in confinement.

TOMMY, TOMNODDY, TOMNORRY, or TAMINORIE. Vide Puffin.

TOPE. Vide Wren-common.

TRITTICHAN. Vide Oyster-catcher.

TURTLE-SEA. Vide Auk-little.

TYSTE, TAISTE, TEISTY, or TOIST. Vide Guillemot-black.

WAGTAIL-GREY. Motacilla boarula.
Bewick Br. Birds, 1. t. p. 196.

We must have been extremely unfortunate in our constant personal researches into the secrets of nature, never to have found either the Grey-Wagtail in summer, nor the Yellow-Wagtail in winter, since we are told of such occurrences. We have resided in a part of the country where the Yellow species was extremely common during the summer months, and where the Grey was as plentiful as we ever observed them to be in any part of England during the winter; but in no instance could we find that either appeared in the other season.

Mr. Bolton says the Grey-Wagtail appears in April, and retires in September: this confirms what has before been asserted, that they breed in Cumberland: and as the author of *Harmonia Ruralis* resided in Yorkshire, it should seem that his observations regarded that county. The nest and eggs appear to greatly resemble those of the Yellow-Wagtail.

In the southern promontory of Devon we have seen this bird in April, but never at any time between that and September: but we are assured by Mr. Tucker, that in his neighbourhood, about Ashburton, in the same county, it is not uncommon throughout the year; and that in the summer of 1808 he saw two pairs, to one of which belonged four young birds that had recently left their nest; the manners of the other pair indicated that they had a nest. These were observed in June, upon the borders of the Dart, not far from Ashburton.

So powerful an evidence as this, of the Grey Wagtail being indigenous to Devonshire, must induce us to consider that its extreme locality in the southern parts of England in the breeding season, has caused so many doubts; and these doubts were strengthened by having had ocular proof that the two species, this, and the Yellow, have been frequently confounded; and that in no instance has the Grey species occurred to us in the incubating season within the southern provinces.

WAGTAIL-PIED, or BLACK and WHITE. Vide Wagtail-white.

WAGTAIL-WHITE. Motacilla alba.

Lath. Syn. Sup. ii. p. 230.

Nat. Miscel. t. 207.

Bewick Br. Birds, i. t. p. 194.

PROVINCIAL.

PROVINCIAL.

Pied, or Black and White Wagtail.

The author of the work first referred to very justly remarks as follows:

"However authors may multiply this genus, we have "certainly no more than three in England: viz. the White-"Wagtail, common almost every where at all seasons; the "Grey-Wagtail inhabiting all the southern counties the "winter half of the year, departing northward as the spring "approaches; and the Yellow-Wagtail, which is not ob-"served any where, except in the summer season."

To this opinion we do subscribe, except that in a few local instances the Grey species has been known to breed in the south.—See Wagtail-grey.

WAGTAIL-YELLOW. Motacilla flava.

Bewick Br. Birds, i. t. p. 198.

It is singular that this species should appear in considerable flocks in the south of Devon in the autumn, in their route of migration, and yet it is a rare occurrence that any are seen on their return in the spring; and more rare for them to breed in that part: indeed we do not recollect an instance of seeing this bird in any part of Devonshire in the nesting season.

The autumnal visits of the Yellow-Wagtail are like other birds somewhat irregular. In the year 1802, we first observed a flock on the 8th of September; these were in a valley, on pasture land attending sheep, and picking up the flies which were disturbed by the browsing of the cattle; and were so close to their feet as to appear in danger of being trod upon.

In 1803, a flock appeared in the same situation rather earlier. In 1804, we observed one flock as early as the 25th

of August, and another on the lawn before the house, on the 25th of September. In 1805, larger flocks than usual appeared, attending on cattle as early as the 26th of August, and every succeeding year they were observed sooner or later in the southern promontory of Devon.

Mr. Tucker informs us, that he has constantly observed these flocks farther from the coast at the same season, especially about Ashburton; but he never heard of their breeding in those parts.

The young birds of most species are of course less vivid in their colours than the old, but we suspect that the adults of the Yellow-Wagtail change at that season and become more plain; for in none could we observe the bright yellow appearance so conspicuous in the male in spring; and they all seem to possess an olivaceous band across the breast.

Devonshire appears to be in the line of migration for other species of birds which are rarely found to breed there, or even to stop on their passage in their vernal flight long enough to be much noticed, but in autumn return by slow degrees.

Thus the Land-Rail or Crake-Gallinule is sometimes found in considerable abundance in the autumn in particular districts, but is rarely known to breed in the south of Devon, or even to visit that part in the spring.

WARBLER-DARTFORD. Sylvia dartfordiensis.
Lin. Trans. ix. p. 191.—Id. vii. p. 280.
Bewick Br. Birds, i. t. p. 210.
Lath. Syn. Sup. ii. p. 241.

In the former part of this work it will be observed that we had discovered this species in Cornwall, and from the appearance of some shot in the month of September, evidently in their nestling feathers, we had little doubt but that they were bred in that county. Since that period, the Dartford Warbler

Warblĕr has been noticed by us to be by no means uncommon in the South of Devon, and to be truly indigenous to that part, continuing the whole year amongst the thick furze, where it breeds. The discovery of their nests with eggs and young, induced us to lay the subject before the *Linnæan Society*, who has honoured it with a place in their *Transactions* above quoted; for the benefit, therefore, of our general readers, we cannot do better than extract the essential parts of that paper.

"In a paper which I had the honour to lay, some time since, before the *Linnæan Society*, some notice was taken of the discovery of this little bird in the Southern parts of Devonshire: and I there remarked, that as it had been so frequently observed to be a winter inhabitant, a circumstance not favourable to its being a migrative species, (as it is said to breed in Provence, on the Continent, so much farther south),* I was not without hopes of ultimately proving it indigenous to this part of England.

"My opinion that this species of Warbler bred with us, was greatly strengthened, by a letter which I had the pleasure of receiving from a scientific friend in Cornwall, well known in the literary world, (Mr. Stackhouse, of Pendarvis) who assured me, that his brother had observed these birds for several years to inhabit furze, near Truro; that last year as well as the present, they were plentiful during the summer season; and that he had not only seen them every month in the year, but had observed young ones soon after they had left the nest, though his search for the nest and eggs had been in vain.

*Provence is situated between 33 and 34 degrees north latitude, and 5 and 7 east longitude; and therefore, as these birds have been also found in England in latitude 51, and west longitude 5, there can be no doubt but all the intermediate space, taking in nearly the whole of France, is inhabited by them more or less wherever the situation is congenial to their habits.

"This information redoubled, if possible my ardour, and I visited a large furze common in my neighbourhood, where I had seen several the preceding autumn; and upon close search on the sixteenth of July, three pairs of old birds were observed, two of which had young evidently by their extreme clamour, and by frequently appearing with food in their bills.

"On the 17th, my researches were renewed, and after three hours watching the motions of another pair, I discovered the nest with three young: it was placed amongst the dead branches of the thickest furze, about two feet from the ground, slightly fastened between the main stems, not in a fork.

"On the same day, a pair were observed to be busied, carrying materials for building; and by concealing myself in the bushes, I soon discovered the place of nidification, and upon examination, found the nest was just begun. As early as the 19th, the nest appeared to be finished; but it possessed only one egg on the 21st, and on the 26th it contained four, when the nest and eggs were secured.

"The nest is composed of dry vegetable stalks, particularly goose grass: mixed with the tender dead branches of furze, not sufficiently hardened to become prickly; these are put together in a very loose manner, and intermixed very sparingly with wool. In one of the nests was a single Partridge's feather. The lining is equally sparing, for it consists only of a few dry stalks of some fine species of *carex*, without a single leaf of the plant, and only two or three of the panicles. This thin flimsy structure, which the eye pervades in all parts, much resembles the nest of the Whitethroat. The eggs are also somewhat similar to those of *Sylvia cinerea*, but rather less, weighing only 22 grains; like the eggs of that species, they possess a slight tinge of green; they are fully speckled all over with olivaceous-brown and cinereous,

cinereous, on a greenish-white ground; the markings becoming more dense, and forming a zone at the larger end.

The young were considered no small treasure, and were taken as soon as the proper age arrived for rearing them by hand; which is at the time the tips of the quills and the greater coverts of the wings expose a portion of the fibrous end.

By experience, Grasshoppers (which at this season of the year are to be procured in abundance) are found to be an excellent food for all insectivorous birds; these, therefore, at first were their constant food, and after five or six days, a mixture of bread and milk, chopped boiled meat, and a little finely pounded hemp and rape seed, made into a thick paste, were sometimes given, to wean them from insect food by degrees; this they became more partial to than even Grasshoppers, but they afterwards preferred bread and milk, with pounded hemp-seed only, to every other food, the smaller house or window-flies excepted.

"Before these birds left their nest, I put them into a pair of scales, and found that they weighed about two drams and a quarter each. At this time they ate in one day about one dram and a quarter each, so that in two days each consumed more than its own weight. Such a repletion is almost incredible, and doubtless greatly beyond what the parent birds could usually supply them with, which by observation appeared to consist of variety, and not unfrequently small *Phalænæ*: their growth, however, was in proportion to the large supply of food.

"This interesting little family began to throw out some of their mature feathers on each side of the breast, about the middle of August, and the sexes became apparent. At this time they had forsaken their Grasshopper food, feeding by choice on the soft victuals before mentioned.

"The nestling attachment of these little birds was very conspicuous towards the dusk of the evening, for a long time after

after they had forsaken the nest, they became restless, and apparently in search of a roosting-place, flying about the cage for half an hour, or until it was too dark to move with safety, when a singular soft note was uttered by one which had chosen a convenient spot for the night, at which instant they all assembled, repeating the same plaintive cry. In this interesting scene, as warmth was the object of all, a considerable bustle ensued, in order to obtain an inward birth, those on the outside alternately perching upon the others and forcing in between them: during this confusion, which sometimes continued for a few minutes, the cuddling note was continually emitted, and in an instant all was quiet.

"Nothing can exceed the activity of these little creatures; they are in perpetual motion the whole day, throwing themselves into various attitudes and gesticulations, erecting the crest and tail at intervals, accompanied by a double or triple cry, which seems to express the words cha, cha, cha. They frequently take their food while suspended to the wires with their heads downwards, and not unusually turn over backwards on the perch. The males, of which there were three out of the four,* began to sing with the appearance of their first mature feathers, and continued in song all the month of October, frequently with scarcely any intermission for several hours together: the notes are entirely native, consisting of considerable variety, delivered in a hurried manner, and in a much lower tone than I have heard the old birds in their natural haunts. This song is different from any thing of the kind I ever heard, but in part resembles most that of the Stone-chat.

---

*To account for four, as there were only three in the nest, it is proper to remark that another young one belonging to some other nest had been found amongst the furze, and bred up with the other three.

"The

"The Dartford Warbler, like the White-throat, will sometimes suspend itself on wing over the furze, singing the whole time; but is more frequently observed on the uppermost spray, in vocal strain for half an hour together.

"Buffon, who appears to have been the first, if not the only person on the Continent, who knew any thing of the Dartford Warbler as a naturalist, seems to have known very little more than that such a bird existed, and that it had been found in Provence, (as his name of *Le Pitchou de Provence* evinces) but knew nothing of its habits. If he had not figured it in *Pla. enl.* 655. f. 1. it would scarcely be conceived that the history given by that author could be intended for this species. We must, therefore, conclude that he, like other great men, was deceived in that part of its natural history, related by M. Guys, of Marseilles, from whom he seems to have collected, that this bird not only feeds amongst cabbages on the smaller Lepidopterous insects, but that it roosts amongst their leaves to secure itself against the Bat, its enemy.

"To this curious account, implicit faith cannot be given; for as on the Continent furze is by no means uncommon, except in the more northern part, there can be no reason for believing that the nature of this little bird is so different in Provence from what it is in England, where it is only found to inhabit the more extended tracts covered with that shrub. If indeed it were necessary to hide itself at night, from the Bat, furze is better calculated for that purpose than cabbages; but I believe there is no species of that genus in *Europe*, sufficiently large to attack even our most diminutive bird, the Golden-crested Wren, which we may safely conclude has no occasion to hide itself from any European species of *Vespertilio*.

"Science unfortunately is too frequently blended with fiction occasioned by too large a share of credulity; the detection of such errors is a work of time, and a series of years are often

often required to correct what, according to the general merit of an author, has more or less been stamped with credit.

"Experience from ocular demonstration has at last been able to collect materials concerning the natural history of *Sylvia Provincialis*, which clearly evinces that M. de Buffon was misled, and that, in fact, little was known of the habits of this elegant little warbler till the present discoveries."

These birds are not, as we at first supposed, confined to the south of Devon, contiguous to the coast, but have been observed in the more central parts of that county. In the autumn of 1809, several were noticed by Mr. Comyns, at least fifteen miles north of Exeter, amongst furze, one of which was shot and sent to us for examination.

We have very little to add to the above account, but that we find, by recent observation, the Dartford Warbler is rather an early breeder, so that they either breed twice in the summer, or some accident must have caused their breeding so late as that before mentioned. In 1805, we observed a pair of these birds carrying food in their bills early in the month of May; from which, and their continual vociferations, there could be no doubt of their having young, and it was also evident the young had quitted their nest and were sculking amongst the thick furze. Carefully did we examine every part for the nest, where the birds were most clamorous, but in vain; but there was no doubt that the young were frequently very near by the temerity of the parent birds. The artifices these little creatures made to induce us to follow them, in order to entice us from the spot, was highly amusing: their usual cry was changed into a scream of distress; they would almost suffer the hand to touch them, and then fall from the spray, and tumble along the ground, as if fluttering in their last struggle for existence.

WARBLER-GRASSHOPPER. Sylvia Locustella.
Lath. Syn. Sup. ii. p. 240.
Fauvette tachetée, Pl. Enlum. 581.

By some unaccountable accident the *Alauda trivialis* of *Linnæus* and *Gmelin* was referred to for the Grasshopper-Warbler, as well as for the Pipit Lark, in the *Ornithological Dictionary;* whereas it should appear both these authors were unacquainted with *Sylvia Locustella.*

Some confusion still exists with respect to this bird, from an idea that it is a Lark and not a Warbler; we therefore beg leave to observe that the *Sylvia Locustella* has not a single character of a Lark, and is not in any thing similar to the Pippet, or Tit-Larks. It has no long claw behind, resides always in thickets, is incapable of running on the ground like a Lark, but moves by hopping; so that we can only ascribe the confusion to a want of real knowledge of the bird.

The tail is a remarkable character of this bird, differing entirely from that of any of our Larks; it is more cuneiform than that of the Sedge Warbler, the outer feather being full an inch shorter than the middle ones, which are sharp pointed at the end; the others becoming less sharp towards the outer ones, which are nearly rounded at the tips: the wings are remarkably short, reaching very little beyond the base of the tail; and the first feather is shorter than the second. If these characters are attended to, in addition to what has already been given, the bird cannot possibly be mistaken.

We have not been able to trace this species far north, nor into all the south-eastern counties: the borders of Gloucestershire and Hampshire have hitherto been the utmost of their known range eastward; and from thence probably in all the western counties, as it extends into Ireland.

In

In a tour through Bath to London, and from thence into the eastern counties; and lastly from Lincolnshire in a direct line to Somersetshire; in the spring of the year, the well known note of this species of Warbler, never once assailed our ears, although every other migrative species of the genus were heard in various parts. In the same year several were observed about Kingsbridge, in Devonshire, one of which we afterwards saw in the collection of Mr. Vaughan, that was shot on the 19th of May. We have more than once had auricular proof of its inhabiting Devonshire; but it certainly is by no means common any where in England, and extremely local.

It has been said, that besides the grinding note, it utters a very agreeable kind of warble, and that the male is said to entertain its mate with a nocturnal song. On the contrary we believe the Grasshopper-Warbler has no other note than that *Sibilous* one, from whence the name is derived; and this is uttered more frequently about dusk than at any other time, but not after it is quite dark. If it had any song we must have heard it, from our long attention, and daily acquaintance with the species for some years during the spring.

WARBLER-REED. Sylvia arundinacea.

Wren-reed. Orn. Dict.

Lesser Fauvette, Bewick Br. Birds, i. p. 220.

It is not unusual to find this and the Sedge Warbler confounded together.

Mr. Bewick has certainly described and figured the Reed Warbler, which is erroneously called the Passerine Warbler *Motacilla Passerina* of Linné; a species that has never yet been discovered so far west in Europe as England, although probably farther north. This author has also attached the name of Reed Fauvette to the Sedge Warbler, which serves only to continue the confusion between these two species.

We

We have never been able to ascertain this bird in the west of England; indeed its manners and habits are so similar to those of the Sedge Warbler, that it becomes difficult to trace it, especially as it is undoubtedly more rare and more local.

WARBLER.SEDGE. Sylvia salicaria.

Reed Fauvette, Bewick Br. Birds, i. t. p. 223.

Had the author referred to called this species Sedge-Fauvette, it would not have continued that confusion in names which has already caused the two species to be confounded. If, however, attention is paid to the white mark over the eye, it is a criterion of distinction between the Sedge and the Reed Warblers, for the latter has it not.

WATER-COLLY. Vide Ouzel-water.

WATER CRAKE. Vide Ouzel-water and Gallinule-spotted.

WATER-WAGTAIL. Vide Wagtail-white.

WHAAP or STOCK-WHAAP. Vide Curlew.

WHEATEAR. Sylvia œnanthe.

White-rump, Bewick Br. Birds, i. t. p. 238.

PROVINCIAL.

Chickell, Hedge-chicker, chack, check, Chacker, or Chack-bird.

On the 24th of March, 1804, a vast number of these birds made their first appearance on the south coast of Devon, near Kingsbridge, in a low sheltered situation, and continued in flock the whole of the day, busied in search of food: the flock consisted entirely of males, without a single female amongst them. For some time the wind had been fluctuating, and the weather cold, attended with hail and snow, for a day or two preceding their appearance, and a strong gale of wind from the east, obliged these birds to make a landing so much farther to the westward than usual in such numbers.

The

The Wheatear is by no means common in Devonshire or Cornwall in the breeding season, and never plentiful in either of the migrative seasons; but is most frequently observed on the fallow lands in the autumn.

The Wheatear is scattered over every part of Great Britain more or less.

Mr. Pennant in his Voyage to the Hebrides, observed it in the Isle of Rum.

Mr. Fleming assures us it breeds in Orkney and Zetland, and retires before winter.

On the Continent it extends further northward: and is also known in southern Asia.

WHEWER or PANDLE-WHEW. Vide Wigeon.
WHIMBREL-BRASILIAN. Vide Curlew-Brasilian.

Doctor Turton in his *British Fauna*, informs us this species was shot a year or two since in Anglesea. This is without doubt the same bird we have mentioned, under the articles Curlew-Brasilian and Ibis-glossy. For further remarks see those birds.

WHITE-BAKER. Vide Flycatcher-spotted.
WHITE-RUMP. Vide Wheatear.
WHITE-WHISKY-JOHN. Vide Shrike cinereous.
WHITE-THROAT-LESSER. Sylvia Sylviella.
Lath. Syn. Sup. ii. p. 239.

If this is the *Motacilla longirostra, Der Spisskopf* of Beckstein, *Naturf*, 27. S. 43. 2. which Doctor Latham quotes; we have not been able to find any thing in the bill or head, that should entitle it to such a name. The bill is indeed longer than that of the Yellow Wren, or the Lesser Pettychaps, as the bird is larger; but it is not so long as that of the Reed-Warbler, or the Greater Pettychaps.

The Doctor says, that he received this bird from Sweden, under

under the name of *Motacilla Curruca,* but whether it is the bird which goes by the name of *Kruka* in that country, and is described under that head in the *Fauna Suecica,* is scarcely to be determined.

The Lesser White-throat, like the Greater Pettychaps, seems to increase in number towards the eastern coast of the south of England: and is more abundant in the enclosed parts of Lincolnshire than in any other, as far as our observation has gone; and though the Greater Pettychaps has been rarely found as far north as Lancashire, and westward in Devonshire; the Lesser White-throat has never yet been noticed so far in either direction.

WHIT-FINCH. Vide Finch-chaf.

WIGEON. Anas Penelope.

Lath. Syn. Sup. ii. p. 354.

Lin. Trans. iv. p. 111. t. 13. f. 9. (trachea).

Bewick Br. Birds, ii. t. p. 352.

PROVINCIAL.

Pandle-Whew, Yellow-pole.

The female of this species is about seventeen inches in length: the bill is like that of the male, but not quite so blue: irides similar: the head and neck speckled with dusky and ferruginous, by reason of each feather being minutely barred: the feathers of the upper part of the back dusky, with two or three slender bars of ferruginous-brown: scapulars dusky-black with ferruginous margins: breast plain vinaceous-brown: the speculum of the wing is not green as in the male, but wholly black, except the tips which are white; two of the tertials are margined with white on the outer web; those next the body with rufous-margins; many of the smaller coverts, which are brown, are margined with white: the tail consists of fourteen feathers: legs like those of the male.

Var.

Var. 1.—The bill as usual; the head a mixture of ferruginous and cream-colour, speckled with black; on the crown a few yellow feathers: the upper part of the neck behind marked like the hinder part of the head but paler: chin dusky, becoming mottled on the throat with white: the fore-part of the neck is a mixture of black and pale ferruginous, the former predominating: the lower part of the neck and sides of the breast pale vinaceous, on the former are a few scattered brown feathers, barred with dusky, in semi-lunar lines, one or two large bars on each feather: the back and scapulars are mixed with some plain brown feathers, others elegantly marked in small undulating lines of alternate black and white: the coverts of the wings very pale brown, inclining to white towards the last series; the largest covering the secondary quills are white on the outer webs, tipped with black and edged with white: the speculum green and black as in the Common Wigeon: the first tertial white on the outer web as usual, the two next dusky edged white: the sides marked with fine undulating lines of dusky and white: from the upper breast to the vent white, behind the vent brown; under tail-coverts and part of those above are black: the primary quills and tail as usual: the latter is cuneiform, and the feathers cinereous and pointed.

Var. 2.—In this the whole head and neck is rufous, becoming ferruginous on the hind head, nape, and cheeks; and all parts marked with small spots of black; each feather has a black tip: the upper breast and sides of the body down to the tail deep ferruginous, the former obscurely barred, the latter intermixed with scattered feathers, marked with fine undulating lines of black and white: the back and scapulars mottled and varied with ferruginous and dusky feathers in large bars, and black and white feathers in fine undulating lines: the under parts to the vent white: the feathers behind the vent white, with broad dark ferruginous bars: the upper tail-coverts similar, but not so ferruginous: all the coverts of the

the wings except at the elbow for half an inch, and round the ridge, are pure white; the greatest series that impend the speculum is tipped with black: the primary, and secondary quills, and the tertials are as usual; in the latter, the first feather has the whole outer web pure white, the inner web brown, in the two next the outer web is deep black with a broad margin of white, the inner web brown: the bill, legs, and tail as usual; the latter having fourteen pointed cinereous feathers, pretty long and cuneiform, extending a little beyond the tips of the wings when closed.

The former of these appears to be a young male bird in its first change of plumage, attended with some *lusus* feathers, especially the black on the fore part of the neck, and the general paleness of the other colours. It will be observed that the size, as well as the bill, legs, tail, speculum, and tertials, are similar to those of the Wigeon. The few remaining nestling feathers on the neck, and the yellow ones just putting forth on the crown, all prove it to be that bird.

The second variety is only the usual summer change of plumage, differing in nothing but a little individual variation, as no two are ever observed to be exactly alike. The great patch of white on the coverts of the wings is probably occasioned by age. In both these the mottled appearance of old and new feathers are evident; the former is a bird of the first year beginning his male plumage; the other is an old bird throwing off its spring plumage.

The labyrinth at the bottom of the *trachea* of the male, very much resembles that of the Pintail, being bony and globular; but differs in some respects when examined together, in its attachment to the side of the windpipe; but which the figures given in the *Linnæan Transactions* quoted, will better explain.

It has been generally asserted that the Wigeon will not breed in confinement, or at least that the female will not

make a nest and perform the act of incubation; but that she will lay eggs, which are generally dropped into the water.

Lord Stanley informs us that he procured a female Pintail in London that had (he was told) bred in confinement: this bird paired with a male Wigeon in his Lordship's menagerie, and produced the first year nine or ten young, all of which were destroyed by the Rats. The second year she produced six young, four of which are now living, and are above a year old. It is remarkable that this Pintail was so tenacious of her nest in the advanced state of incubation, as to suffer herself to be lifted to examine the eggs, and continued to effect the hatching of them. In the last year the same bird produced eggs, but from some unknown cause forsook them.

The hybrid birds are much plainer than the male Pintail, but more like the female, with a little of the head of the male Wigeon. The male has the posterior parts somewhat like the male Pintail, but the middle feathers of the tail are not so long.

In these hybrid Pintail Wigeons there is an evident sexual distinction in plumage as well as in size, from which it was natural to conclude, that the organs of generation were capable of susceptibility; and this has been incontrovertibly proved. The males have been frequently observed to tread the female, and she has laid eggs two successive years; but as no young were produced, his Lordship concluded some sexual defect existed in the female. Under the circumstances related, it should appear that each had the natural stimulus to propagation, which could not exist without perfection of the sexual organs. It is perfectly clear the female has all the requisites for continuing the breed; eggs must originate in the ovaries, and be perfected in the uterus, which together with their exclusion prove the female to possess sexual perfection. With respect to the male, his actions prove him to have concupiscential inclination; it is, therefore, reasonable

to

to conclude no generative defect existed in either sex, but that from some unknown cause, the female did not sufficiently perform the act of incubation; especially as she was very wild, and was frequently observed sitting on the edge of the nest, not on the eggs. This is a reasonable inference, but as all the necessary means were not taken to ascertain whether any of the eggs had the appearance of prolificacy, we dare not determine hypothetically the laws by which these extra-natural beings are governed.

We do not recollect a single instance on record, where hybrid birds have bred; the Goldfinch and Canary-bird frequently produce a spurious breed, but no instance occurs of the hybrid birds constituting a species by their union. It has generally been considered that mules of any kind are incapable of procreation; if, however, there is any dependence on public records, apparently well attested, there has been two instances of the offspring between the Horse and the Ass having produced young, the one in Scotland the other in the West Indies. It may however, be presumed that although in these hybrid animals the parts of generation are sometimes perfect, the excitability to propagation is extremely torpid. Domestication and confinement, is undoubtedly the cause of such unnatural connection, but it would be highly interesting to discover how far it might be carried. For the only instance of a hybrid bird having laid eggs, we are indebted to Lord Stanley, and we take this opportunity to publicly acknowledge our obligations to his Lordship, for many interesting observations from personal experience, concerning many other birds; and as he is an experimental ornithologist, we doubt not but that by the love of science, and the extensive practical means with which his Lordship is furnished, the public will considerably benefit by his experiments.

It is a remarkable circumstance, that in the pond where the male Wigeon paired with the female Pintail, there were

The Wigeons in our aquatic menagerie, continue in pairs almost the whole year. They are extremely garrulous and pugnacious; scolding and fighting (especially with birds of their own species) occupy much of their time. Their call note is an extremely clear and shrill whistle.

Lord Stanley has had a male Wigeon pair with a dun-coloured variety of the Common Duck, the eggs of which were prolific.

The Wigeon appears to be the most plentiful species of Duck that is taken in our decoys; more are caught in the decoys of Somersetshire and Devonshire than Duck, Teal, and all other wild fowl collectively, as we are assured by an old and experienced decoy-man. The same person asserts, that Wigeon and Teal rarely assemble together in the pool; nor frequently with Duck; but when Ducks come to the pool, Teal frequently follow.

The male Wigeon, like the Pintail and Shoveler, makes a double moulting in the course of a few months. In the month of July he loses the the varied colours, and becomes dark-ferruginous on the back, scapulars, and sides, but not so much like the female, as the male Pintail.

Baillon makes a remark on the change of plumage of this species, and says the same changes take place in the Pintail, the Gadwall, and the Shoveler.

WIGEON-BLACK. Vide Duck-tufted.
WIGEON-BLACK-HEADED. Vide Duck-Scaup.
WIGEON-CUR. Vide Pochard.
WIGEON-GREAT-HEADED. Vide Pochard.
WIGEON-PIED. Vide Garganey and Golden-eye.
WIGEON-RING-EYED-DIVING. Vide Duck-scaup.
WIGEON-TUFTED. Vide Duck-tufted.
WIGEON-WHITE. Vide Smew.
WIGEON-VARE. Vide Smew.

WIGEON-VARE-HEADED. Vide Pochard.
WILLOW-BITER. Vide Titmouse-blue.
WOOD-CHAT. Vide Shrike-wood.
WOODCOCK. Scolopax-rusticola.
Rural Sports, ii. t. p. 434.
Bewick Br. Birds, ii. t. p. 60.

By dissecting many Woodcocks, we have observed, that the female is generally the largest, and most commonly partaking more of the ferruginous colour, with less of the cinereous, than the males. The first feather in the wing of the male is not always white on the outer web, but sometimes has two or three faint bars on that part; which in the female is barred like the other quill feathers.

Continual proofs of the partial residence of this species with us the whole year, are given, amongst which Mr. Foljambe, of Osberton, Nottinghamshire, informs us that he has a specimen of a half-fledged young Woodcock, taken in May 1802, in Brodsworth wood, near Doncaster, in Yorkshire. The same gentleman says, that on the 5th of April, 1805, a brood of four was hatched in a wood at Shireoaks, near Worksop, Nottinghamshire; that the old bird had been frequently seen upon the nest, which was composed of moss, bents, and dry leaves; and that the shells of the eggs were taken very soon after hatching, as the bird had been seen on the nest the same day the shells were picked up, and frequently before.

Lusus Woodcocks have been frequently killed, most of which are pale brown, or cream colour, retaining the greater part of their markings of a fainter hue; and rarely white. A fine specimen of the former was obligingly sent to us by Mr. Bultoel, of Fleet, in Devonshire; it was shot the latter end of Dec. 1808, and proved a male.

Woodcocks have for some centuries been in high estimation, and consequently before the art of shooting flying had

made much progress, they were sought for on the ground by the fowler: but, by far the greater quantity were taken in nets and springes; both of which are still in partial use, but the former is the most destructive. The glade in a wood is the usual place selected, across which a net is suspended by pulleys fixed to opposite trees, and the person attending it is concealed, holding the cord in his hand. When a Cock strikes against the net the shock is felt, and the cord instantly let go, by which means the net falls over and entangles the bird. Sometimes the side of a high hedge, in certain situations, has been fatal to Woodcocks, by the means of net, suspended between a tree in the hedge, and a pole erected at the distance of twenty or thirty feet; for it is observable that these birds fly low and under shelter as much as possible, both going to and coming from feed in the evening and morning just about dusk.

Springes or springers are usually set in moist places on the verge of woods, especially where the fowler perceives perforations made by the bill of a Woodcock, termed borings; or the mutings, called the splash. In such places a common ground springe is formed of an elastic stick, to which is fastened a horse-hair noose, which is put through a hole in a peg, fastened into the ground, to which a trigger is annexed. And in order to compel the Woodcock to walk into the trap, an extended fence is made on each side, by small sticks, set up close enough to prevent the bird passing between; these concentre at the trap, so that in this funnel shaped fence, the Woodcock in feeding is compelled to pass through the narrow passage and is almost to a certainty caught by the legs.

The Woodcock is naturally a very shy and retired bird, rarely taking wing by day, except disturbed; but just at the close of day, all, as if by common consent, quit the woods nearly at the same instant and wander over the meadows in search

search of splashy places and moist ditches for food; retiring to their hiding places again, just at the dawn of day. Thus when most other land birds are recruiting exhausted nature by sleep, these are rambling through the dark; directed by an exquisite sense of smelling, to those places most likely to produce their natural sustenance; and by a still more exquisite sense of feeling in their long bill, collect their food.

The eye is not called into use, for like the Mole, they actually feed beneath the surface and by the sensibility of the instrument which is thrust into the soft earth, not a worm can escape that is within reach.

The eyes of the Woodcock are large in proportion, and like those of some other nocturnal birds, are the better calculated for collecting the faint rays of light in the darkened vales and sequestered woodlands, in their nocturnal excursions; and thus enable them to avoid trees and other obstacles which continually occur. The nerves in the bill, as in that of the Duck tribe, are numerous, and highly sensible of discrimination by the touch.

A Woodcock in our menagerie very soon discovered and drew forth every worm in the ground, which was dug up, to enable it to bore: and worms put into a large garden-pot covered with earth five or six inches deep, are always cleared by the next morning, without one being left.

The enormous quantity of worms that these birds eat is scarcely credible; but really it would be the constant labour of one person to procure such food for two or three Woodcocks. The difficulty of collecting a sufficiency of such precarious aliment, determined us to try if bread and milk would not be a good substitute; and we found that by putting clean washed worms into that mess, the bird soon acquired a taste for this new food, and will now eat a large bason of bread and milk in twenty-four hours, besides worms.

Lord

Lord Stanley has had a Woodcock in confinement these three years, which is frequently fed on raw flesh.

From experience there appears great probability that many birds of a similar habit to the Woodcock, or the Ruff, might be induced to change their diet by degrees in the manner stated, that would otherwise starve by a total change at first. The Common-Godwit is like the Ruff, usually fattened by such soft food; but the Knot will starve before he will touch it, and therefore requires inducement to change his diet. In this manner we induced a Curlew to change its natural food, as before related.

It is observable, that previous to the flirting or rising of a Woodcock from the ground, which, in the language of sportsmen, is termed flushing, the tail is thrown up in a perpendicular direction, and by spreading the feathers the white tips all appear distinct.

Few naturalists at present will be found to doubt the actual migration and re-migration of birds; and that many repair annually to the same haunts, and same nest to breed. So many instances of this have been related upon good authority, that it scarcely requires strengthening by further proof; but a circumstance so well authenticated as that related by Mr. Bewick is deserving of note.

"In the winter of 1797, the game-keeper of E. M. Pleydell, Esq. of Watcombe, in Dorsetshire, brought him a Woodcock alive and unhurt, which he had caught in a net set for rabbits. Mr. Pleydell scratched the date upon a bit of thin brass, and bent it round the Woodcocks leg, and let it fly. In December, the next year, Mr. Pleydell shot this bird, with the brass about its leg, in the same wood where it had been first caught. Communicated by Sir John Trevelyan, Bart."

The same author mentions from the same authority, that a White Woodcock was seen three successive winters in Penrice wood, Glamorganshire. It

It is generally admitted, that Woodcocks are more plentiful in Devonshire and Cornwall than in any other part of England, but they are not near so numerous as in Ireland, and they seem to increase in number in the western parts of that kingdom. From this circumstance it should appear, that the great column of Woodcocks in their passage to and from the north, fly in that latitudinal direction, which is intersected by the western parts of Ireland. Those which continue their route further south, would find their next resting place in Portugal; and as that part of the continent of Europe is nearly in the same latitudinal direction with Ireland, we should expect to find them equally plentiful in that country. In this we have not been disappointed; for we have lately been assured by our friend Capt. Latham, who is with the combined army in Portugal, that Woodcocks are very plentiful in the month of November. This gentleman in a letter to the author says "We have been so much in motion, that I have not had much time for shooting, but I have some days killed fourteen or sixteen couple of Woodcocks to a pointer, in low shrubs."* It seems they become scarcer as the

*Since the above was written for the press, the author has to lament the loss of this valuable friend, who had scarcely recovered from a violent concussion of a cannon-ball, in the first siege of Badajos, when he volunteered the command of a battery in the last successful siege, in the storming of which he gloriously fell in the attack of the breach. Thus, by the death of Capt. Latham, the country has lost a most excellent officer, and his friends a most worthy man. Natural as it is for us to deplore the loss of a valuable friend, we must reflect, that without such sacrifices, our independence under the present system of a most formidable enemy, grasping at universal dominion, is insecure. In defence therefore of our birth-right as Britons, the author has to exult, that one most nearly allied to him in the bonds of consanguinity also fell as honorably, at the ever memorable battle of Albuera, the reflection of which, though painful, is mitigated by patriotic consideration.

The reader will, we are assured, pardon this trespass of the pen,

the winter advances even in that country, so that we may reasonably infer, that a large portion continue the same latitudinal direction southward, until they arrive in Africa. In the beginning of March on their return northward, Woodcocks are again observed in Portugal in great abundance, but disappear as the warmer season approaches.

We shall not discuss the subject of migration here, as we propose to enlarge upon that interesting part of physiology in another place.

WOODPECKER-GREAT-BLACK. Picus martius.

In Doctor Pulteney's Catalogue of the Dorsetshire birds, this is noticed as having been more than once killed in that county; one in particular, is said to have been shot in the nursery at Blandford, and another at Whitchurch.

Lord Stanley assures us, that he shot a *Picus martius* in Lancashire; and we have heard that another was shot in the winter of 1805, on the trunk of an old willow-tree in Battersea fields.

WOODPECKER-SPOTTED-GREATER. Picus major Bewick Br. Birds, i. t. p. 122.

It will be seen in the former part of this work, under the article of Woodpecker-spotted-middle, that *Picus medius* of Linnœus, was considered as only the young of this species in its nestling feathers; and we there took notice of a specimen which we supposed was in the intermediate state of plumage. We are now happy to have it in our power to decide this matter most satisfactorily, by the kind communication of Lord

---

when he recollects that it is dictated by the voluntary effusions of the mind reflected from the heart, desirous of recording the memory of two valuable men, and gallant young officers, whose bravery thousands may emulate, but none surpass.

Stanley.

Stanley, who took five young of this species just as they were about to leave their nest, and found them to be the *Picus medius*. The old birds attended and fed them for some time in confinement. Both sexes have the crown of the head red for some time after they leave the nest.

This point having been determined upon such good authority, we beg that the synonyms of the *Picus major* and *medius* may be consolidated.

WOODPECKER-SPOTTED-LESSER. Picus minor.
Nat. Miscel. t. 225.
Lath. Syn. Sup. ii. p. 140.
Bewick Br. Birds, i. p. 124.

There is much probability that the young of this species like those of the last, possess red crowns in their nestling plumage without regard to sex.

WOODQUEST. Vide Dove-ring.

WREN-GOLDEN-CRESTED. Sylvia Regulus.
Bewick Br. Birds, i. t. p. 233.
Golden crowned Wren, Nat. Miscel. t. 165.

PROVINCIAL.
Marygold Finch.

A pair of these birds in the collection of Mr. Luscombe, of Kingsbridge, are of a cream colour, with the usual yellow crown, by which the two sexes are distinguished.

This species appears to be common throughout Europe, and is said to have been found both in Asia and America.

The song of the Golden-crested Wren (which is short, weak, and with little variety) is repeated with small intervals almost through the day in the spring, and until it has young. It is always busy, and active amongst the trees, especially firs, to which it is extremely partial.

WREN-KITTY or CHITTY. Vide Wren-common.

WREN-WHITE. Vide Wren-yellow.

WREN-WOOD. Sylvia Sylvicola.

Lath. Syn. Sup. ii. p. 237.

Yellow Willow Wren, Bewick Br. Birds, i. p. 229.

Regulus non cristatus major, Bris. Orn. 3. 482. A.

Ind. Orn. ii. p. 550 d.

Larger not crested Wren, Will. Angl. p. 228.

Larger Yellow Wren, White Selb. p. 55.

Lath. Syn. iv. p. 514. C.

Motacilla Sibilatrix, Das Lanbrolchen, Naturf. 27. p. 47. 4.

This species of Warbler appears to be found occasionally in most parts of Great Britain, in situations congenial to its habits.

WREN-YELLOW. Sylvia Trochilus.

Lath. Syn. Sup. ii. p. 238.

Nat. Miscel. t. 189.

Asilus, small yellow Bird, Raii. Syn. p. 80. A. 10.

It has been asserted that this is the smallest of the European birds, the Golden-crested Wren excepted; but this is a part of the general confusion between several of these little yellow species. In fact it is considerably larger than the Lesser-Pettychaps, and equal in size to the Wood-Wren, which has been improperly called the largest Yellow-Wren, when in truth, they are both of equal weight and length. On the contrary, the Lesser Pettychaps is full one-fifth less weight than either of the others, being only about two drams, the others, two drams and a half: the length four inches and a half; the others measure about five inches and a quarter. We repeat this in order to clear up as far as possible the confusion in these birds. The Yellow Wren, rarely, if ever, precedes the Lesser-Pettychaps in its vernal migration, but does

does so usually in its autumnal; indeed the latter has been known to remain with us the whole winter, the other never.

WRYNECK. Yunx torquilla.
Nat. Miscel. t. 156.
Bewick Br. Birds, i. t. p. 115.

How far this species is found northward in England we have not been able to clearly ascertain, but, as Mr. Bewick speaks of having found Emmets in the gizzard of one he dissected, we may conclude it is met with in Northumberland, though probably rare so far north. It is more common in the eastern than in the western counties, and we observed it near the coast in Lincolnshire; but we believe it is rarely found, except where there are old and decayed poilard elm trees.

With us it is by no means so generally diffused as the Cuckow; nor do we believe it extends so far north on the Continent as that bird. It is, however, known in Asia and Africa, as well as in Europe.

Is said to sometimes make a nest of dry grass; but the eggs, which we have more than once taken, were placed on the bare decayed wood, in the hole of a tree.

YELLOW-YOWLEY. Vide Bunting-yellow.

APPENDIX.

AUK-GREAT. Alca impennis.

This species appears to have become extremely rare on the north coast of Britain. The natives in the Orknies informed Mr. Bullock, in his late tour through those islands, that one male only had made his appearance for a long time, which had regularly visited Papa Westra for several years. The female, (which the natives call the Queen of the Auks) was killed just before Mr. Bullock's arrival. The King, or male, Mr. Bullock had the pleasure of chasing, for several hours, in a six oared boat, but without being able to kill him, for though he frequently got near him, so expert was the bird in its natural element, that it appeared impossible to shoot him. The rapidity with which he pursued his course under water, was almost incredible.

BUNTING-SNOW. Emberiza nivalis.

In a late edition of Pennant's British Zoology, the editor has brought the Tawny and the Snow-Buntings together, as birds of the same species, the first in the summer, the other in the winter plumage. This, however, cannot be the case, since

since the Tawny Bunting is only found in the southern parts of England in winter.

We have given our opinion upon this subject in the preceding pages, and, therefore, shall only notice here, that other persons continue to be of an opinion that the Snow, the Tawny, and the Mountain Buntings are only varieties of one species: and it is proper to remark, that that excellent practical ornithologist Mr. Foljambe, in a letter to the author is of this opinion. This gentleman says "a few years ago, I shot more than forty from the same flock, during severe weather in the month of January, hardly any two of which exhibited precisely the same plumage, but varied from the perfect Tawny to the Snow-Bunting in its whitest state; the feathers of those of the intermediate state being more or less charged with white."

On the other side of the question, another ornithological friend, Mr. Anstice (who presented us with specimens of the Mountain Bunting) assures us that he examined the flock from which he shot these birds and several others, with a pocket telescope, and found no difference amongst them, but such as the different sexes produced with which we were favoured. That in two other instances he observed similar flocks in severe weather. It is also remarkable, that in no instance have any birds, in the plumage of the Snow or Mountain-Buntings, appeared so far westward as Devonshire, to our knowledge, although the Tawny seems to be by no means uncommon in the winter; many of which have come under examination from different parts of the county. Is it not possible, that the different species may occasionally congregate, as observable in other well known birds, and consequently may have been shot from the same flock?

Happy as we should be to reduce the subjects in natural history to their proper limits, we cannot at present be perfectly satisfied, that the distinctions we have pointed out, (which

appeared

appeared in those few specimens we examined) are not permanent characters, at least between the Mountain Bunting and the other species. We have less scruple in considering the possibility of the Snow and the Tawny Buntings being of the same species, since we have witnessed the extraordinary changes in the plumage of some of the northern birds. Those who have an opportunity of procuring these birds in great abundance, would do well to collect them at different times of the year, especially the earliest and the latest that appear in this country, with a view to obtain specimens in those intermediate changes of plumage incidental to season, which would probably bring the subject of controversy to a final decision.

DIVER-NORTHERN. Colymbus glacialis.

It should appear that the size of this species has been commonly exaggerated, or they must vary very materially, since those which have come under our examination did not exceed ten pounds, and an old or matured male measured only two feet eight inches. A young female before the plumage was perfected, weighed eight pounds six ounces, and measured two feet seven inches in length. This young female killed in January, has the upper part of the head, back, and sides of the neck dusky-black; back and scapulars black, obscurely marked with cinereous spots; in a few places the matured feathers appear on the scapulars of a deeper glossy-black, marked with the clear white quadrangular spots as in the adult: the coverts of the wings, rump, and upper part of the thighs black, with numerous small, pure white spots: the sides of the lower neck and breast, continuing along the sides of the body under the wings, streaked black and white: the whole under parts of the bird, from chin to vent white: the tail is short and rounded, consisting of twenty black feathers tipped with white.

From this immatured specimen we obtain the knowledge of the primary plumage, which is essential, because with so little of the character of the adult, the bird might have been mistaken for some other species, had not the few square spots of white on the scapulars betrayed its title.

A Northern Diver taken alive, was kept in a pond for some months, which gave us an opportunity of attending to its manners. In a few days it became extremely docile, would come at the call, from one side of the pond to the other, and would take food from the hand. The bird had received an injury in the head, which had deprived one eye of its sight, and the other was a little impaired, but notwithstanding, it could by incessantly diving, discover all the fish that was thrown into the pond. In defect of fish it would eat flesh.

It is observable that the legs of this bird are so constructed and situated, as to render it incapable of walking upon them. This is probably the case with all the Divers, as well as the Grebes.

When this bird quitted the water it shoved its body along upon the ground like a Seal, by jerks, rubbing the breast against the ground; and returned again to the water in a similar manner. In swimming and diving, the legs only are used, and not the wings, as in the Guillemot and Auk tribes; and by their situation so far behind, and their little deviation from the line of the body, it is enabled to propel itself in the water with great velocity in a straight line, as well as turn with astonishing quickness.

The thighs of the *Colymbus* as well as of the *Podiceps* are so closely connected with the body as scarcely to admit of any motion, and cannot be brought sufficiently forwards to enable them to walk; the principal action therefore, is in the *tarsi* and *phalanges*, or those parts usually called the leg and foot. At the joint, which connects the *tibia* to the *femora*,

or thigh bone, there is a process at the head of the bone of considerable length, which being firmly united with the side of the body, allows of very little motion in either of those joints; indeed the *tibia* is united to the body its whole length, so that the leg has scarcely any motion but at the part usually called the knee. The conformation of these bones in the *colymbi* is most curious; the femoral joint or bone of the thigh is remarkably short, and stands at right angles with the body; upon this joint the *tibia* has a sub-rotary motion, which gives a very considerable turn of the foot, and enables the bird to steer its course with great ease and celerity under water, by the simple action of turning the foot more or less outwards. Ducks and most other aquatic birds, throw out one leg and foot when they require to turn in the water; whereas the Divers derive the same advantage by a turn of the foot only.

The Speckled Diver *Colymbus stellatus* we have also had alive, and found it to be as incapable of walking, and the whole of its structure is precisely the same as *Colymbus glacialis*.

The cry of both these birds, varies from a high pitch to a deep croak.

DIVER-RED-THROATED.

This bird, we have before noticed, breeds in Shetland; Mr. Bullock thinks it lays only two eggs, as he found that number in more than one nest, in the Isle of Hoy. The egg is very oblong, of an olive colour, blotched with dusky. The nest is usually made in swampy places, on the banks of fresh water lakes. One of the nests, which Mr. Bullock found, had just been plundered by an Arctic Gull, who had made a breakfast on one of the eggs.

DUCK-AFRICAN. Vide Teal-African.

DUCK-CASTANEOUS. Anas nyroca.

No bird has puzzled the British Ornithologist more than the Ferruginous Duck of Mr. Pennant, but which has by most naturalists been considered as the female of some other species. In the preceding pages it will be seen that we had considered *Anas nyroca* as the male of *Anas ferruginea*, but from a fortunate examination of a recent pair of the *nyroca* in the collection of Mr. Foljambe, we are inclined to be at variance with our former opinion. Our aim is to elucidate, and therefore candour obliges us to acknowledge where our former conjectures have not in our present opinion been verified. At the time the article Duck-ferruginous went to the press, we had never seen the female *nyroca*, but strongly suspected these birds would be found to differ only in sexes.

Whether the Ferruginous Duck of Mr. Pennant, is the *nyroca* in any state of change in plumage, or whether it is the female *Anas dispar* as Dr. Latham suspects, we are really at a loss to determine, but certainly it cannot be by its description the female *nyroca* now before us.

In the *Arctic Zoology*, we find in the description of the Red-Duck, a little difference from that of the Ferruginous-Duck of the *British Zoology*, to which it refers, but neither is sufficiently like the female *nyroca* to suffer our former conjecture to pass, without expressing considerable doubt of its belonging to that species, and we still have to hunt for the *Anas-rufa* of the *Fauna Suecica*, unless it should hereafter prove to be a young bird of *nyroca* in its first plumage.

To Mr. Foljambe we are particularly indebted, not only for sending us both sexes of *Anas nyroca* for examination, but for some valuable remarks concerning this species. From the information of this accurate naturalist, this bird is not so uncommon in the London market, as might be expected, since it has only of late been considered as British. Seven or eight

have

have been examined by Mr. Foljambe, several of which were fresh, and varying a good deal in plumage; some having no white either in the wings or under parts of the body, probably young birds.

The description of the male of this bird has been given at Duck-ferruginous, we shall therefore only add some particulars of that sex, which the kind communication of Mr. Foljambe has enabled us to do.

On the 6th of December, 1812, three of this species were bought in Leadenhall-market, two of which were females, and which rather exceeded the male in size. The weight of one female was thirty-six ounces; that of the other only a quarter of an ounce less: the length eighteen inches; breadth the same. The male weighed thirty-three ounces and three quarters, and measured in length sixteen inches and a half.

There is very little difference in plumage between the male specimen belonging to Mr. Foljambe and that in our collection, but being in better feather, it is observable, that on the lower part of the neck, the fine chesnut colour is interrupted by a dusky-ferruginous collar, which passing behind becomes blended and uniform with the colour of the back: from the vent to the tail-feathers pure white: the rump and upper tail-coverts dusky-black, coming down on the sides in the line of the vent, forming a strong contrast with the white feathers beneath.

The female very much resembles the other sex in plumage, but the colours not quite so strong, especially the chesnut on the breast, and the white beneath is not so pure: the white on the chin is not so extended, nor is there any black that borders the white on the sides behind the vent: the legs as well as the toes are paler. The irides of both sexes are yellow.

This species belongs to the diving family of the Ducks, all of which have short wings that scarcely reach beyond the base of the tail when closed.

Independent of the description of Mr. Pennant's Ferruginous or Red Duck being so much at variance with the female *nyroca*, no one can contemplate the figure given of it, but must conceive that the head, neck, breast, and upper parts of the body are spotted and barred, although the description mentions no spots, but only that those parts are fine reddish-brown.

We have more than once received from our ornithological friends, the female Wigeon in its autumnal plumage (which is sometimes very rufous) for Mr. Pennant's Ferruginous Duck; and we must confess, that by uniting the figure and description together, we have at this time a female Wigeon, that may be said to have the head, neck, breast, and upper parts of the body fine reddish-brown; and these parts are spotted and mottled as the figure in the *British Zoology* represents. The weight of the Ferruginous Duck also corresponds with the Wigeon and not with the *nyroca*: the colour of the bill and legs also appears to agree with that of the Wigeon.

Under all these circumstances, we have been induced to consider the *Anas nyroca* as probably distinct from the *ferruginea*, and have therefore given it the English name prefixed.

The advantage derived from attending to the *trachea* in aquatic birds which are found to vary so extremely in plumage, has been shewn in several instances, and we have now another opportunity of proving how essential it is to attend to the conformation of that part. The following is a description of the *trachea* and its labyrinth, which was extracted from a male Castaneous Duck, and which will be found to differ from any thing of the kind hitherto described.

The *trachea* of this species somewhat resembles that of the Scaup Duck, but it greatly decreases in size at both extremities, and the bony or cartilaginous rings surround it in all parts; whereas in the Scaup the *trachea* scarcely decreases at the

the upper extremity, and the under side for its whole length, except near the labyrinth, is membranaceous, the bony rings not extending over that part. This characteristic distinction of the Scaup has not, we believe, been before noticed.

The diameter of the *trachea* of the *nyroca* is in the middle nearly half an inch, and at the lower extremity not above one eighth of an inch. In the labyrinthic part, there is also some affinity between these two Ducks, but that of the Scaup is very superior in size, and the *orca* or bony box behind the *tympanum* is vastly more tumid. In both there is a bony arch which crosses the *tympanum*, but the back of the *tympanum* in the *nyroca* Duck is nearly all bone, except a little on the left side; whereas in the Scaup, that part is also covered with a thin membrane, intersected with fine ramifications of bone. Vide plate of *trachæ* and index annexed.

DUCK-KING.

We are assured by Mr, Bullock, that he found this bird breeding in Papa Westra, one of the Orkney Islands, in the latter end of June. It lays six yellowish-white eggs, rather less than those of the Eider Duck, and like that bird, covers the eggs with its own down. The nest was on a rock impending the sea.

The female (according to Mr. Bullock's account) much resembles that sex of the Eider.

DUCK-LONG-TAILED. Anas glacialis.

We are assured by Mr. Foljambe, that he lately had an opportunity of examining three fresh specimens, two old males, and one young bird of the same sex, destitute of the long feathers in the tail. In all these the legs were lead-colour, pale along the toes and ridge of the legs; the sides of the legs and webs dusky-black: the bill of the matured birds

deep

deep orange in the middle, and black at the base and extremity. In the young bird the bill was lead-colour, with a slight tinge of yellow in the middle; the point black.

The *trachea* of this species is of a very singular structure; it rather increases in size at each extremity; at the lower end close to the labyrinthic part, one side is flattened, and instead of the bony rings continuing round of their full breadth, this part is crossed with four distant linear bones as fine as a thread, which support a delicate transparent membrane three quarters of an inch in length, and almost three-eights of an inch broad at the base: below this ribbed membrane projects the bony part of the labyrinth, with a *tympanum* of a kidney shape, placed transverse to the *trachea*, the middle of which is flat and membranaceous, but more opaque than is usual: the opposite side of the labyrinth is depressed; from the bottom of this part the two *branchiæ* originate. This curious structure will be better explained by consulting the plate of *trachæ*, and the index annexed to it.

DUNLIN. Tringa Alpina.

When we look into the writings of the more ancient, as well as the latest modern ornithological works, we find that *Tringa alpina* and *Tringa cincla* are described as distinct species. It is, however, remarkable, that so common, and so extremely plentiful as the Purre is known to be in the temperate parts of Europe, no naturalist should have described its nest and eggs. We might indeed have expected to find that part of its history amongst the writings of more northern physiologists, since it has been a generally received opinion, that the abundance which flock to our shores in the winter, repair more northward to obey the great dictates of nature.

It will be recollected by those naturalists who explore the works of nature in her native retreats, that the Dunlin makes its

its appearance early in the spring, and remains within more or less, locally, till the autumn, or the beginning of winter, and then disappears.

It will also be seen that the nest and eggs of this bird have been frequently noticed; a recent instance of which has been remarked in the preceding pages, and we have had ocular demonstration of its breeding on the coast of England.

The circumstance of these two birds appearing and disappearing in constant alternation, added to their general form, their corresponding weight and measurement, the exact similitude of their bill and legs, and their cuneiform shape and colour of the tail, have long induced us to conjecture that they were actually the same species; and that in fact the black spots on the breast, and other variations in colour observed in the Dunlin, were not more extraordinary than those changes incidental to the breeding season, which are noticed in the black neck and breast of the Golden and the Grey Plovers. This suspicion was not a little strengthened by the enquiries of several of our scientific friends, who had found these birds approach so nearly in plumage, that they required a clearer definition of the two species. In order, therefore, to obtain the best information, we procured as many of these birds as possible, about that period of the seasons when the changes of plumage are known to take place, the early part of both the spring and autumn; by so doing we have had the satisfaction to succeed in obtaining these supposed species in the intermediate changes of plumage, so as to leave no doubt that they are one and the same.

It will be seen in the preceding pages, that we described a variety of the Dunlin, shot early in October, the plumage of which was a mixture of the two birds, but we could not venture to annihilate one species so long established unimpeached, until further corresponding evidence had been obtained. Since that part was printed, other specimens partaking

taking more of the Purre were killed in the early part of December; these had more or less black feathers, margined with rufous, especially on the body near the junction of the wing, and a few intermediate feathers in the scapulars that evidently bespoke the Dunlin, although there were no distinct spots on the belly. From what we have lately observed, the progress of change in plumage is similar to what has been noticed in all other birds which have a double annual moulting. The young birds appear first in the plumage of the Purre, and the old birds throw off the Dunlin plumage at the close of the breeding season, and like their young continue the whole winter in that dress by which they have been distinguished by the name of Purre.

Some do not appear to complete the autumnal change till the middle of December, and in the latter end of March, or the beginning of April, many commence the vernal change. Under these circumstances we are induced to believe, that no bird in the plumage by which the Dunlin has usually been recognized, will be met with in the three dead winter months; nor will the Purre, as usually described, be found from the beginning of May to the latter end of July.

EAGLE-GOLDEN. Falco Chrysaetos.

We are able to announce, on the authority of an indefatigable ornithologist, that the Golden Eagle actually breeds in the islands belonging to North Britain. Mr. Bullock assures us, that not only the Golden, but also the Cinereous and Ringtail Eagles breed in the Isle of Hoy, and that he took the nests of the two first, containing each two young Eaglets, in the year 1812.

FALCON-GREY. Falco gresius.

We are indebted to Mr. Foljambe, for obtaining the opinion

of

of an intelligent Falconer in the service of Sir Thomas White, with respect to this and other obscure species of this tribe. This experienced German Falconer says, that the Grey Falcon is the Tercel, or male of the Jer-Falcon in its first plumage. The Lanner he declares to be clearly a Peregrine. But the spotted Falcon he asserts is a distinct species. He has taken that bird repeatedly in the Netherlands, but it is not used for falconry, being a bird of slow flight, allied to the Buzzards, which he explained to Mr. Foljambe, by pointing out the strong resemblance in the form of the wings, in the specimen belonging to that gentleman's collection, which we are assured is without doubt the Spotted Falcon of the *British Zoology*.

With respect to the Lanner, it does not appear that this Falconer is acquainted with any distinct species by that name; the bird in Mr. Foljambe's collection which answers to the Lanner of Pennant, he is decidedly of opinion is a Peregrine.

In fact the *Lanarius* of Aldrovandus and Belon, appears to be lost, or at least not to have been ascertained as a distinct species, even in the time of Buffon, who says it is not in any of the cabinets in France, nor does any author figure it, Albin excepted.

To this experienced person, with respect to the Falcon tribe, the question was put as to the identity of the species, commonly in use on the Continent, by naturalists called *Falco communis*. The reply was, that it is the same as the Peregrine.

It will be seen in the preceding pages, that we have expressed doubts upon this subject; but we really are at a loss to account for all those varieties to which the Common Falcon is said to be subject, unless effected by confinement, since the Peregrine appears in its state of liberty to be as little variable in plumage as any species of the tribe.

FALCON-STONE. Falco Lithofalco.

Falco Lithofalco, Gmel. Syst. p. 278.

Ind. Orn. 1. p. 47.—Bris. 1. p. 349.—Id. 8vo. p. 101.

Lithofalco and Dendofalco, Raii Syn. p. 14. 8.

Le Rochier, Buf. 1. p. 286.—Planch. Enl. 447.

Stone or Tree Falcon, Will. Orn. p. 80.

Lath. Syn. 1. p. 93.

The scientific reader is here presented with a bird which has long maintained itself as a distinct species, and we believe it is the only instance of its being recorded as a British subject. Whether it is a good species or not, is a matter of some consideration, and perhaps with the little knowledge we are able to collect, it may be long before it is finally ascertained. All we can do for the present, is to bear record as to the existence of a British species of Falcon, which is clearly that of the author's to which we have referred, and to offer our humble conjectures thereon.

The bird in question has so exactly the plumage, and is so nearly the size and general appearance of the male Merlin, *Falco æsalon*, that was it not for the colour of the irides, and a previous knowledge of the opinion of abler naturalists, we should not have hesitated to have pronounced it to be one of the varieties of that species.

For the means of introducing this into the Fauna of British birds, we have to repeat our obligations to Mr. Foljambe, whose accurate description of the bird it will be proper to transcribe, in order to enable the practical ornithologist to assist in throwing more light upon the subject.

The bird in question was shot at Osberton, in Nottinghamshire, in the month of December, 1810, and proved a male.

There would be no necessity of describing the bird after what we have said of its exact resemblance to the male Merlin, but as several varieties, or supposed varieties of that bird

bird have been described by different authors, we speak of its likeness, generally, to the Merlin in that plumage, which has most usually occurred to us.

The length of the bird in question is about twelve inches: bill lead-colour: *cere* and irides yellow. The feathers on the crown and back of the head, brownish cinereous, with black shafts: throat cream-colour, with very narrow brown streaks: forehead cream-colour, extending in a very narrow line over the eyes: cheeks, back of the neck, and breast, rufous with longitudinal spots of brown: thighs pale rufous, with a few very narrow brown lines pointing downwards: the back, scapulars, and wing coverts bluish-cinereous, with black shafts to the feathers: the prime quills have their inner webs marked with six large white spots, the base edged with white; the outer web of the first feather is scalloped with white; the second and third feather the longest: the wings when closed reach within an inch of the end of the tail: the tail is blueish-cinereous, with four black bars, that at the end an inch in breadth, the others narrower; the tip white; the under side of the tail white, barred as above: the legs and toes yellow and slender.

Mr. Foljambe is in possession of another of this species which he suspects to be the female, but as it came to him in a dried state, this important object could not be ascertained. It is a trifle larger than the other and the throat is plain: the outer web of the first quill is white, and the tail has only one black bar about half an inch in breadth at the end, with the tip white. In every other respect it resembles the last described.

It now becomes necessary to offer some observation upon this bird, in order to induce other naturalists to pay particular attention to some characters the Merlin invariably possesses, (should any bird similar in appearance occur whose irides are yellow) and that has not been noticed in the Stone

Falcon

Falcon just described. In our description of the Merlin it will be seen that we remarked a singular formation of the two first quill feathers; the under wing-coverts, and under scapulars are rufous, with round white spots on each web: the notch in the bill should also be attended to. If these characters should be found similar in both these birds, there would remain no distinction but in the irides; and when experience has taught us that, that is a character liable to some variation, it cannot be wholly depended upon. We have seen the Moor Buzzard, and the Peregrine Falcon, with the irides yellow, though of very rare occurrence, but the observation is sufficient to raise suspicion that the Merlin may also, occasionally, vary in that particular, and then the two birds must be united in one species.

No conclusion can be drawn from the bird above mentioned, supposed to be the female of the Stone Falcon, for even the colour of its irides is not known, and the difference in plumage so trifling from the other, that scarcely two Hawks of any species will be found so nearly alike that differ in sex.

It must also be recollected, that most authors have considered the Merlin as subject to considerable variation in plumage, especially with respect to the number of bars in the tail, and the sexes are easily ascertained by the plumage. In fact, some of the varieties of the Merlin, have, by some writers been described as distinct species, while others have brought them together, possibly with as little certainty.

It should, however, be considered, that in all stages of either sex, the Merlin should have the dark streak down the shaft of the feathers on the upper parts of the body and wing-coverts.

We shall now dismiss this subject, with expressing very considerable doubts whether the *Lithofalco* and the *œsalon* be actually distinct species, and shall be ready to acknowledge our obligations to any naturalist, who will favour us with sufficient proof to the contrary.

Since

OLIVACEOUS GALLINULE.

Since the above was written, an eminent falconer in the service of Sir Thomas White, declares, that having trained the Merlin repeatedly, he found that both sexes by age and full maturity became what has been called the Stone Falcon.

GALLINULE-OLIVACEOUS. Gallinula Foljambei.

We have here to record with pleasure, a new species of Water-hen, which was fortunately rescued from the spit, and consequently from oblivion by the hand of science. Mr. Foljambe discovered it in a poulterer's shop, early in the month of May 1812, together with some other valuable birds, which had recently been received from the fens in Norfolk. The bird now occupies a place in the excellent museum of that gentleman, who has kindly permitted us to take an engraving of it from an admirable drawing executed by Mr. Sydenham Edwards, with which we were favoured, accompanied with an accurate description, originally taken from the bird when it was recently killed.

The weight was not noted; but the length is seven inches and a half: breadth ten inches and a half. The bill is nearly three-quarters of an inch long, of a greenish-yellow colour, the base red: irides and orbits bright red, inclining to orange: cheeks and forehead dusky-cinereous; sides of the neck and throat pale-cinereous: breast, belly, and thighs plain dark-cinereous or slate-colour, like the Water-Rail, without spots or markings of any kind: the back of the head deep olive-brown: hind neck lighter, being of a yellowish-olive: the feathers of the back have a mixture of olive-brown and dusky-black, the margins being mostly of the former colour, with paler edges: scapulars dusky-black, with broad olive margins: coverts of the wings olive-brown: quills dusky, the outer webs edged with olive: rump and upper coverts of the tail very dark olive-brown, with a mixture of dusky-black:

black: the feathers of the tail are of a deep dusky-brown, the shafts paler and the lateral ones margined with olive-yellow: vent and under coverts of the tail dusky-cinereous, some of the feathers deeply margined with sullied white: sides behind the thighs olive, slightly margined as the last: the legs, toes, and knees olive.

The tail when examined by Mr. Foljambe had only ten feathers; but this must be considered as accidental, as we believe all the species of this genus have invariably twelve feathers in that part when perfect. It is rather rounded at the end, the exterior feathers being half an inch shorter than the middle ones.

When this bird was first examined it was suspected to be the Soree Gallinule, *Gallinula Carolina* of *Index Ornithologicus*, but except in size it has no other characters of that bird, for all authors record that species as having a bare space on the forehead, a circumstance not unusual in several of the genus, exemplified in the Common Gallinule.

The face round the bill, the chin, and part of the neck before, is in the Soree black; Mr. Pennant says, the greater part of the front of the neck, is deep black: the belly and sides dirty white, the latter barred downwards with black.

Highly laudable as it must appear to avoid as far as possible a useless multiplication of species, yet we must not conclude the subject is exhausted, and that new objects are not to be found even within our own limited sphere.

With such a very material difference between the present species and the Soree, we should have no hesitation of pronouncing them distinct, even had they inhabited the same country, because whatever might have been suspected of the change in plumage, the bare forehead is a permanent character. In the present case, we might, if requisite, urge another powerful reason against these birds being brought together, namely, that the Soree is truly transatlantic, and we may venture

venture to affirm that no such short winged bird ever found its way from the new to the old world. The continent of America has its peculiar inhabitants, few of which have ever been found in Europe.

Some of the aquatic species of birds belong equally perhaps to the north of both the American and European continent, as the distance between these two quarters of the globe is there not very distant, or at least is in a manner connected by an extended chain of islands that may favour an interchange; but we must consider, that whatever migrations take place from the higher latitudes of either country on the approach of the rigorous season, they are performed over land, or coastwise southerly, each in their respective country.

Strange as it may appear that a bird so ill calculated for migration, should be for the first time discovered in a country so populous and so cultivated, and where the science of natural history is more generally diffused in the present era, than in any part of the world; yet it is probable that the Foljambean Gallinule may hereafter be found to breed in the fens of the eastern parts of Great Britain. It is more than probable the bird in question would be mistaken for the Water Rail by the generality of sportsmen who might meet with it, and consequently may have frequently been consigned to oblivion, for want of the eye of the naturalist, and the rescuing hand of science.

The habits of the smaller species of Gallinules are their principal security; they are not only equally capable of diving and concealing their bodies under water, with only the bill above the surface to secure respiration, but run with celerity and conceal themselves amongst the rushes and flags of swampy places, and are with great difficulty roused even with the assistance of dogs, depending more on concealment in thick cover, than upon their wings, to avoid danger. From

these circumstances it is that the Spotted Gallinule is rarely obtained, and that have probably hitherto prevented our knowledge of the present species, as well as the Little Gallinule described in another part of this work.

It is remarkable too that this hitherto concealed and solitary species should not come to light singly, for about the same time that Mr. Foljambe obtained this specimen, Mr. Plasted, of Chelsea, procured another, that was shot on the banks of the Thames at that place, and which is now in his collection. This circumstance would at once obviate any suspicion of its being a *lusus* variety of the spotted species, if such could by any one have been suspected; and it is remarkable that these two specimens are exactly alike.

GODWIT-CAMBRIDGE.

This long sought for bird we have suspected would turn out to be an immatured Redshank, as the description originally given by Mr. Pennant does not differ much from the first plumage of that species. This opinion appears to be strengthened by what is related in a late edition of Pennant's *British Zoology*, where it appears that Mr. Boys had sent a bird to Dr. Latham in the month of March for the Cambridge Godwit, which proved to be a young Redshank in the plumage of that season. "From this circumstance" says the Editor "and that the original description of the Cambridge Godwit was taken from a stuffed specimen, we presume it might, with propriety, be erased from the list of distinct British species."

GODWIT-RED. Scolopax Lapponica.

Finding by the communication of our friends, that this bird is not clearly identified by the general description which is given of it, we shall endeavour to point out those characteristic marks in the plumage, which in all the specimens that have come under examination have been invariable. Two

Two very fine specimens of different sexes, belonging to the collection of Mr. Foljambe, killed the latter end of September, 1812; another mutilated bird, shot about the same time in Devonshire, and one which has been long in our collection, are now before us. In these four birds there is scarcely a variation in plumage, but the difference in size, length of leg, and length of bill is very considerable. Mr. Foljambe's male specimen measures seventeen inches: length of the bill three inches five eighths: length of the leg three inches and a half. The weight was not ascertained, but from comparison it must have weighed near twelve ounces. The specimen shot in Devonshire, weighed only six ounces: length fourteen inches: that of the bill two inches three eighths: the leg two inches and a half.

The other two specimens are of different intermediate sizes, with the bill and legs in proportion. Thus we perceive, that although these birds are extremely similar in plumage, they are very dissimilar in size. What particularly characterizes this species, is the rufous colour of the neck and upper part of the breast, the back, the scapulars, and tertials being barred or spotted with black and rufous, or ferruginous in some specimens, on the latter part: the cheeks and throat are usually paler, the latter nearly white, and the white from the upper mandible runs over the eye: the under part of the body from the breast, is cinereous white: the rump and lower part of the back, concealed by the scapulars are black; and the greater part of the upper tail-coverts are white, but the lower series impending the tail are tipped with black; the tail feathers are white at the base, and black at the end, slightly tipped whitish, the outer feather having most white, that colour commencing within half an inch of the tip, and running diagonally across, carries that mark in the same direction through all the feathers, so that the middle ones have only their base white, which is concealed by the

black tips of their coverts; thus the tail when closed, appears all black, except the exterior margin of the outer feather and the pale tips.

We do not know of any species, foreign or domestic, that can be mistaken for the Red-Godwit, except any variety of the Jadreka Snipe we are not acquainted with, has been confounded with it. It will, however, be seen, that one character of that bird is the plain spotless plumage of the upper parts. Variety A. of the Red-Godwit described in the *General Synopsis* from a bird in the late Leverian Museum, appears to be more nearly allied to the Jadreka Snipe.

The black feathers with rufous margins on the back; the black and rufous, or ferruginous alternate bars on the scapulars and tertials; are alone sufficient marks of discrimination in the Red-Godwit.

It will be seen, that the largest specimen here mentioned, is equal in length to our Jadreka Snipe, and there is considerable affinity between the length of the bill and the shape of the claws.

We have in the preceding pages stated, that from the appearance in plumage, these two birds should seem to be distinct species, but knowing that spotted or barred feathers are so frequently the indication of youth, or the change of plumage at one season of the year, suspicions of their being actually the same species, cannot be wholly erased from the mind, though as yet no bird in an intermediate plumage has appeared.

It is probable this is the autumnal plumage, since we find a variety, described with the neck, breast, and sides of a bright ferruginous, the two last barred with cinereous and brown; and we are assured by Mr. Foljambe, that he has three specimens, which have the neck and upper breast of a bright rufous, the lower breast and sides barred with rufous and brown. The tail feathers of all these correspond.

These

These varieties are probably more owing to season than to age, though we may consider the pale-rufous neck and breast without markings, as indicative of youth, since the brighter ferruginous specimens are more or less barred.

It is also probable, that the ferruginous parts have the colour heightened towards the spring, and that more of the markings appear.

Varieties have been described to have the tail either plain dark-brown, with pale edges and tips, or barred with a dark colour upon a rufous ground; but we suspect these variations do not belong to the Red-God wit.

GOOSE-BEAN. Anas segetum.

From recent observations, we are quite sure that this species and the White-fronted Goose are occasionally confounded. It has been generally considered that the colour of the tip of the bill, usually called the nail, is the criterion of distinction; in the Bean Goose it is always black, in contradistinction to that of the White-fronted Goose, which is said to be always white. This, however, is not strictly correct, since we have a specimen of a female of the latter with a black nail to the bill, and this is not a character peculiar to that sex, since we have lately examined another which had that part white.

In two species whose plumage is frequently extremely similar, when the White-fronted Goose is destitute of the black patches beneath, it requires particular attention to other characters to discriminate them. This species is considerably larger, its bill is longer, more compressed towards the end, and broader; its breadth too at the point is the same as in the middle; whereas in the White-fronted Goose the bill narrows a little towards the point. In both sexes of this, (of all we have examined) the bill is black at the base and the tip, the intermediate space more or less orange, as

before described in this Supplement, from a male which weighed about seven pounds, and measured in length two feet nine inches.

The female of this species has the bill marked similar to the other sex, and appears to differ in nothing, except being rather less; but considerably larger than the female White-fronted Goose.

A female in our menagerie has made no alteration in her plumage in moulting. She devours grass, and particularly aquatic plants with avidity, but is content with grain.

GOOSE-WHITE-FRONTED. Anas albifrons.

It is probable the young of this species do not attain the black markings on the under parts of the body till the ensuing breeding season, and the females appear to be entirely destitute of it. This last circumstance was noticed by Mr. Pennant, who well discriminated the species from the Bean-Goose by the bill: he, however, omitted to remark, that the white front in the female is a very narrow band at the base of the upper mandible, not unlike what is observed in the Bean-Goose; from which circumstance, as well as its having no spots beneath, and occasionally having the nail of the bill black, these two birds are sometimes confounded.—Vide Goose-bean.

GREENSHANK. Scolopax glottis.

A very elegant variety of this species having been submitted to our examination by Mr. Bullock, which differs materially from what has hitherto been described, requires notice.

The upper parts of the bird are marked as usual, but darker, and the spots larger on the top of the head, back, and scapulars; the newly moulted feathers on the two last

(known

(known by their comparative brightness) are black, with the margins deeply and angularly scalloped with white; these markings are also particularly elegant on the tertials: the tail-coverts only are white; the rump having a mixture of dusky-black and grey in bars: the tail is barred as usual with zigzag lines: the throat is white: fore part of the neck and breast streaked and spotted with black, the spots increasing in size on the latter: the middle of the belly white; but the feathers on the sides are barred with black: some of the under tail coverts are plain white, others are barred with black: the legs appear to have been yellowish, or perhaps pale green, which in drying turns to dull yellow. The size of the bird, and the length of the bill and legs as usual.

This is an interesting specimen in a state of moult, shewing the newly acquired feathers on the back, scapulars, and coverts of the wings, to have all the spots much larger, and better defined than on the old intermediate feathers, which are dark cinereous, or dusky, with grey spots.

It was not noticed at what season this bird was killed, but we should suspect in the spring, a little before the usual time of departure, and that it had just began to throw out its summer plumage.

GULL-BLACK-HEADED. Larus ridibundus.

We really did not suspect after what had been so fully explained in vol. vii. of the *Transactions* of the Linnean Society, concerning the identity of the Black-headed, Red legged, and Brown-headed Gulls as one species, that we should have occasion to bring the subject again before the public. But as we find in a late edition of Pennant's *British Zoology*, that the editor has made the Red-legged Gull of *Latham's Synopsis* a variety of the Black-headed Gull of the same author, and has continued the Red-legged Gull of the *Arctic Zoology*

Zoology as a distinct species under that title, with a reference to the Brown-headed Gull of Latham, the confusion will become greater than at the time when we undertook to demonstrate, that all these birds were actually one species.

The reason which seems to have induced the editor of the work to which we allude, to continue the Brown-headed Gull of Latham's Synopsis as a distinct species, may be collected from the following paragraph :—

"Mr. Montagu considers this as the young of the Black-"headed Gull, but Dr. Latham in some observations with "which he has recently favoured the editor, supposes that "it certainly is a distinct species, as no Gull in the immature "state of its plumage has a back of an elegant light grey "colour."

The very great regard we possess for our friend Doctor Latham, and the high opinion we entertain for his ornithological knowledge, would induce us to incline to his opinion in all abstruse points in a science he has so long professed, and which he has handled with such highly merited applause; but we cannot compromise fact. It will be seen in the latest works of Doctor Latham, that these birds are brought together as varieties of Larus ridibundus, and we have never heard our friend hint at an alteration of that opinion. Under these circumstances we are inclined to suspect, that the editor of the late edition of the *British Zoology*, has miscomprehended the Doctor's recent observations, in which he is supposed to have asserted, that "no Gull, in the immature state of "plumage has a back of an elegant light grey colour," because the Doctor's experience must have convinced him that this is diametrically opposite to fact. It should be recollected that in all the intermediate changes of plumage from the time a bird leaves its nest to the perfect adult state, there is in some species a very great variation at different ages and seasons; but that variation is constantly similar in the same species where there

there is an uniformity of plumage in the state of maturity. Now it unfortunately happens, that the reasons assigned for the Brown-headed Gull being a distinct species, is contradicted by the fact, that not only the Black-headed, but every other species of Gull whose back is of a Grey colour, invariably perfect the feathers of that part and the scapulars first, and always before the coverts of the wings and the tail. In what manner has the editor of the *British Zoology*, as well as other naturalists, described the Tarrock, and the Winter Gulls, as the immatured Kittiwake, and Common Gulls? are they not stated to have the back grey, while the coverts of the wings are mottled with brown, and the end of the tail black? Under these circumstances, and with the knowledge that Doctor Latham has himself described these two birds in their different states of plumage, as the adult and the young immatured in plumage; it appears obvious, that his observations must have been mistaken.

Our intention has been to elucidate from practical knowledge, and we do assert that all the Gulls retain the marks of immaturity longest on the head, the coverts of the wings, and the tail; and we again repeat, that we have traced the Black-headed Gull through all its changes, in which the Brown-headed is that bird in one of its first mutations.

It must also be remarked that in the same edition of the *British Zoology*, the Brown Gull, *sterna fusca* of Ray, is continued as a distinct species of Gull, with a reference to the Brown Gull of the Second Supplement of *Latham's Synopsis*, which we have shewn is another variety of the Black-headed Gull. It will be observed in vol. vii. of the *Linnean Transactions*, that we had conferred with Doctor Latham upon the subject of this bird, having sent him a specimen with which he was thoroughly satisfied.

In a recent letter from our friend Doctor Latham, he remarks that the Brown Gull or Tern was originally copied by

by others from a drawing of Leonard Baltner. "I have," says the Doctor, "seen Baltner's original drawing in the possession of the late Lord Dartmouth, described to be the size of an Ouzel, with brownish lead-coloured plumage, mottled about the head, and sides under the ears: quills and tail even: short legs and generally black. I can only add that the bill is like that of a Gull."

Whether this is the same bird as Mr. Johnson communicated to Ray, must be doubted, since he says "the whole under side is white: the upper brown: the wings partly brown, partly ash-colour: the head black: the tail not forked." The size is not mentioned, but we may conclude it is a variety of some common species since he remarks that, "these birds fly in companies."

This bird, described by Ray as a Tern, may be of the same species as that given in the second Supplement to *Latham's Synopsis*, which was originally described by Mr. Boys, from a bird killed at Sandwich, and communicated to Doctor Latham as the supposed Brown Tern of Ray, and which we are confident is no other than the young of the Blackheaded Gull. But this bird had not a black head which Ray has described his bird to have; nor did we ever yet obtain any species of Gull, or Tern, with a complete black head, while the wings retained any of the immature brown plumage, but there may be a moment in which such may happen in some individuals, for those parts are perfecting together.

The size of Baltner's Gull precludes the possibility of its belonging to *Larus ridibundus*, a bird so vastly superior in size to an Ouzel; indeed there is but one species of *Larus* that bears any similitude in size to that bird, and that is *Larus minutus*, which in length scarcely equals that of the Ring Ouzel. But as the *minutus* is a Siberian species, and never identified as an occasional visitant to Great Britain,

the

LITTLE GULL.

the possibility of Baltner's minute Gull belonging to that species has been overlooked by naturalists. As, however, *Larus minutus* has very lately been shot in England, there is great probability, that the specimen from which Baltner took his drawing, was of this species in one of its intermediate changes. For a description of *Larus minutus* we refer to Gull-little of this Appendix.

On taking leave of this discussion, we trust the intention cannot be mistaken, as our only motive is elucidation, grounded (if we may be allowed the expression) upon experimental physiology.

GULL-GREAT-BLACK-BACKED. Larus marinus.

In a small flat island lying about thirty miles west of the Orknies, called Soules Kerry, this species of Gull assemble in considerable number in order to breed. Each nest contained four eggs, resembling in colour those of the Herring Gull, but superior in size.—(Mr. Bullock.)

GULL-LITTLE.

Larus minutus, Ind. Orn. ii. p. 813.—Gmel. Syst. p. 595.
—Nov. Act. Stock, 1783. ii. No. 1. p. 120.
Little Gull, Lath. Syn. vi. p. 391. 17.

Length rather exceeding ten inches: length of the bill to the feathers on the forehead, rather more than three quarters of an inch; the upper mandible straight for half its length from the base, the other half considerably arcuated; lower mandible straight to the angle, (two-thirds of its length from the base) from whence it slopes to the point: the inside of the mouth red-orange. The forehead and crown of the head white: the back of the head and a trifle of the back of the neck contiguous dark cinereous, with a hoary tinge: behind the eye a white streak: the lower coverts of the ears black,

black, forming a very conspicuous spot of that colour: between the bill and eye white, but at the anterior corner the orbit is black, from whence to the black spot on the ear is a mixture of dark cinereous and white: the whole upper part of the body appears of a fine cinereous-grey, like that of the Herring, and most of the lighter coloured Gulls, but upon lifting up the scapulars, the lower part of the back is black: the upper tail-coverts pure white, except three or four feathers of the last series, which are tipped with dusky: the tail is slightly concave at the end, but as there is not a regular gradation in the length of the feathers, and an evident dissimilarity in the two sides, there can be no doubt but that they have been recently moulted; all the feathers are white, with their tips black for nearly an inch, except the outer feather, which is nearly all white, having only a small dusky spot at the end on the inner web; the tips are slightly edged with dirty-white: the wings have a mixture of black, white, and cinereous, but the former greatly predominates; the ridge of the wing from the body to the elbow is cinereous intermixed with dusky for nearly half an inch in breadth; all the rest of the coverts are black, several of the lower series slightly tipped with white: the greater quills are elegantly marked, being white, with the exterior web, the shaft, and part of the inner web close to the shaft, the tip and part of the inner margin black, somewhat like the quill feathers of the Magpie; the three first have a small speck of white at the tip, in the others the white spot increases till on the seventh feather the white occupies the place of the black at the tip: the secondaries are more or less cinereous on the outer web, edged with dusky-black towards the base, their tips and inner webs white, with more or less black towards the point, close to the shaft: the tertials are mostly black, with a slight edging of white at the tip: the whole under part from chin to tail is pure white, but the cinereous on the back comes very

very forward on the sides of the breast. The legs rather exceed an inch in length to the knee, and bare of feathers for more than a quarter of an inch above the knee; the foot is small, the inner toe considerably shorter than the others; the middle toe a trifle longer than the outer, measuring rather more than an inch, including the claw; these with the webs and legs appear to have been yellowish, for they have a strong tinge of that colour even after drying. The wing appears to exceed the tail above an inch and a half when closed, and the two first quills are nearly of the same length, from the tips of which to the elbow, is eight inches and a half.

This is another bird of rare occurrence which has fallen to our lot to record in the British Fauna. It was shot on the Thames near Chelsea, and is in the collection of Mr. Plasted of that place, to whom we take this opportunity of expressing our obligations for having suffered the bird to travel into Devonshire for the purpose of inspection.

This specimen of *Larus minutus* is the first that has, we believe, been identified in this country, and is probably extremely rare on any part of the continent so far south. It is not in the plumage of maturity, and consequently is more interesting, because we perceive the same gradual changes as have been noticed in all the species of Gulls familiar to us. It is in an intermediate state, or first change between the nestling and the adult.

In the adult state of plumage, the head and beginning of the neck are black; the rest of the neck, and under parts of the body white: the back, scapulars, and coverts of the wings cinereous-grey: tail wholly white and even at the end. The bill is said to be reddish-brown: irides bluish: legs red.

The little knowledge we have had communicated to us of the habits of this bird, would not have led us to the discovery of the specimen in question, had we not previously ascertained the

the changes in plumage to which all our Gulls are subject. Taking for example the several mutations of the Black-headed Gull, we should now have no difficulty of identifying the Little Gull through all its several changes from the time of its leaving the nest, by comparative reasoning. The second material change of the Black-headed Gull, is, without doubt, a good exemplification of the alteration in plumage of the Little Gull. In this state of plumage we have sufficient marks left to inform us what was its infantine colours, and also what it is in a progressive state of acquiring. The markings of these two species are very similar, but where the feathers are brown in one they are black in the other. From the appearance of the black on the wings, the back under the scapulars, and the tertials, we cannot hesitate to pronounce that the Little Gull is in its first feathers of a very dark colour, probably dusky-black, mixed with grey, similar in markings to that of almost all other of our well-known species, only that their feathers are brown and grey. The dusky appearance of the crown of the head, and particularly the black spot on the coverts of the ears, are true indications of a future black head, evinced by similar markings on the Black-headed Gull; and the black bar at the end of the tail is an invariable character of immaturity in all the well-known species of the Gull tribe.

We have been more particular in noticing these characteristic marks of change, in order that this elegant little species may be identified in any state of plumage, since it is at present so little known.

Its native country appears to be the southern parts of Siberia and Russia, and the shores of the Caspian sea, migrating more northward in summer in order to breed, especially up to the Wolga.

HERON-GARDENIAN.

Pen. Br. Zool. Ed. v. ii p. 28. t. 7.

HERON-RED-BILLED.

The Lesser White Heron is called by this name in the fifth edition of Pennant's *British Zoology*, Vol. ii. p. 25.

IBIS-GLOSSY.

It will be seen in the preceding pages we entertained strong suspicions that the Brazilian Curlew, *Numenius Gaurauna* of Latham's *Synopsis*, introduced into the *Naturalist's Miscellany* on the authority of the Rev. Hugh Davies as a British Bird, was no other than the Glossy Ibis. We are happy to find in vol. 2. of the late edition of Pennant's *British Zoology*, a most ample, candid, and satisfactory apology, inserted by desire of Mr. Davies, which has completely verified our opinion, as that naturalist acknowledges he was led into the mistake by an imperfect specimen, and did not discover his error till several specimens of the Ibis were some time afterwards killed in Anglesea, some of which fell into his hands.

LARK-PIPIT.

This is only a variety of the Tit-Lark.—See a further account of that bird in the following pages, under Lark-Tit.

LARK-TIT. Alauda pratensis.

The various and fluctuating opinions, concerning the distinction between the Pipit and Tit-Lark, have been the means of calling our particular attention to the subject.

It will be seen in the *Ornithological Dictionary*, that we ventured to make these birds distinct, but more recent observations induce us to recall that opinion, and to bring them together as one species. We before noticed, that the Tit-Lark remained with us the whole year, changing its plumage in the autumn and becoming more olivaceous-yellow.

The

The supposed Pipit, on the contrary, was believed to appear in this country only in the autumn, and nothing further had been traced of this bird. With the knowledge, that the annual change in plumage has so frequently deceived the most able naturalists, (a circumstance we have proved in so many instances,) we were anxious to push our researches further respecting these two supposed species.

A bird so common as the Tit-Lark was easily procured at different periods throughout the summer months, from the time of incubation till the autumn. We have taken its nest with young, and have shot young Tit-Larks in the month of July, some time after they had left their nest, when all their feathers were perfect, and have invariably found them in the plumage of the supposed Pipit, differing considerably in the tints from the parent birds. We have also shot the old birds in all the latter months of the year, and have found that their feathers become more like the plumage of the young birds in the autumn, and when completely moulted are not to be distinguished.

This plumage which has been assigned to the Pipit is continued through the winter, but the brighter hue of the olivaceous-yellow becomes faded towards the spring, and the throat, breast, and margins of the feathers of the upper part of the body continue to grow paler as the summer advances, until they are thrown off in the autumn.

With considerable attention to the weight and measurement, it has been found that they are subject to a little variation, but the last variation is found to be as great in one state of plumage as in the other.

After having brought the Pipit and Tit Larks together as one species, it may be suspected by some persons, that the Field Lark, *Alauda minor*, may also belong to the same species; but if all other characters of distinction were wanting, the short, hooked, hinder claw of that bird, is a

clear mark of discrimination. The habits of the Field-Lark are also extremely different: its song is delightful, to which the paltry notes of the Tit-Lark cannot be compared. The eggs too are essentially different from all the several varieties observed amongst those of the Tit-Lark.

In a late summer's tour through the Orkney islands, Mr. Bullock shot a species of Lark upon the hills amongst the heath, which he thought to be new; but this supposition arose more from its apparent habits than from plumage. It was difficult to rouse from the thick heath, and flew but a short distance before it again pitched. This unusual action appears to have been occasioned by an incomplete plumage. Several of these birds were sent to us by Mr. Bullock, and were found to be in moult, some wanted the wing, and others the tail feathers, and the quills were yet tender, so that a defect in flight, probably occasioned a sort of necessity for concealment, or at least an unwillingness to take wing. The great similitude of this bird to the Tit-Lark in its autumnal plumage, or that state in which it has been called Pipit, would not have admitted a momentary hesitation in pronouncing it to be such, had not the manners appeared rather unusual.

These birds were shot in the month of September, and as we happened to have a specimen of the Tit-Lark killed in the same month of the same year, and which had not been exposed, so as to have produced any change in the colour of the plumage, (a circumstance which causes great deception) we had a fair opportunity of comparison. But to prevent all dispute, we caused fresh specimens to be shot throughout the winter and spring of the year, when the Tit-Lark commenced breeding, and by strict comparison with all, we could not perceive the smallest difference, further than those shades of colouring found to vary in the individuals of each.

We have been particular in speaking of this Orkney Lark

on account of the representation we have had of its habit of concealment; for though no distinction is observable between it and the Tit-Lark, we must always bear in recollection the impossibility of separating the Rook and the Crow but by the voice and habits.

We have before remarked, that the Tit-Lark is amongst the few birds found to inhabit the heathy mountains of Scotland, perhaps the only small species that is known to breed in those extensive wastes destitute of every other shelter. In various parts of the Highlands we have noticed the Tit-Lark in summer, and have taken its nest, and we are assured by Mr. Fleming, that it is common in the Orknies amongst the heath, where it is known by the name of Teeting. Is said to reside the whole year in the Orknies, and to frequent the sea shore in winter; possibly the Dusky-Lark may have been confounded with it in winter on the shores, where at all seasons that bird finds a plentiful supply of food and has no occasion to migrate.

LARK-RED. Alauda Pensilvanica.

It should appear, that this rare British bird, is subject to that sort of variety in plumage from season, which has been mentioned with respect to the Tit-Lark. A specimen with which we have been favoured by Mr. Foljambe for examination, has none of that rufous colour, from whence the name was derived, but is of a pale brown above, lightest on the margins of the wing-coverts and tertials: the under parts are also rather paler than usual, but the breast and sides of the body are pale rufous: the cheeks, sides of the neck, and upper breast, spotted in the usual manner: the tail is marked with white on the lateral feathers as usual. In fact, the size, the bill, legs, and the hind claw, bespeak the species; especially the great length of the tail in proportion to the

wings,

wings, which, when closed, do not reach within two inches of the end.

Whether this may be considered as a usual variety, or accidental, the rarity of the bird will not at present enable us to determine. It was taken in the winter 1812, near Woolwich, in a net with other Larks. It measures full seven inches and a half in length.

OUZEL-PENRITH.

Br. Zool. Ed. v. i. f. p. 399.

We are glad to find, that the Editor of the late Edition of Pennant's *British Zoology*, has justly considered this bird as a variety of the Water-Ouzel; but we are rather surprised to observe, that the *cinclus* has changed its place, as Mr. Pennant originally removed it from the genus *Sturnus* to that of *Turdus*, to the last of which it is more nearly allied, though in fact it should constitute a distinct genus. Such we have proposed in our catalogue of Synonyms at the end of this work.

OUZEL-WATER. Turdus cinclus.

The following description of a very elegant variety of this species was obligingly communicated to us by Mr. James Wilson, of Edinburgh, in whose collection the bird is preserved.

Length about seven inches: the bill and irides as usual. The upper part of the head and neck are of a bluish-black, with a slight mixture of brown, the middle of each feather being lighter than the margins: the back, scapulars, rump, and coverts of the wings bluish-black, dashed with hoary grey, the middle of the feathers being of the latter colour; the primary and the secondary quills black, tipped with white: the tail wholly black: the throat, breast, and belly

 white,

white, the extremity of each feather marked with a black semicircular line, which gives those parts a pretty, undulated appearance; these markings are fainter on the throat than on the other parts, and not the least appearance of the rufous band on the lower breast usual in the species: vent and thighs bluish-black, the former with a mixture of white, the latter with brown: the legs and toes black.

This bird was shot early in the spring, at Roslin, near Edinburgh.

Another specimen, very similar to the above, which Mr. Wilson had an opportunity of examining, was shot in a different part of Scotland, at the commencement of the breeding season. It was in company with its mate, which appeared to be somewhat similar in plumage, but as it was never afterwards observed, that fact could not be ascertained.

It will be recollected that a new species had been created out of another variety of the Water Ouzel, upon the authority of the late Mr. Pennant, called the Penrith Ouzel. That which we have just described has a better claim to specific distinction than the solitary instance described of the Penrith Ouzel: indeed it is remarkable, that two specimens of the Scotish variety should be procured exactly similar. Such a circumstance might lead some periodical writers to constitute a new species, but we are inclined to the opinion of Mr. Wilson, that it is only one of those numerous variations incidental to the plumed part of the creation; and that we may fairly conclude it to be a *lusus* of *Turdus cinclus*.

OWL LITTLE-HORNED. Strix Scops.

Strix Scops. Lin. Syst. i. p. 129.—Gmel. Syst. p. 290.—Ind. Orn. i p. 56.

Scops Aldrovandi. Raii. Syn. p. 25.—Will. p. 65. t. 12.

Le Scops, ou Petit Duc. Buf. Ois. i. p. 353 t. 24.—Plan. Enl. 436.

Le

Le petit Duc. Bris. Orn. i. p. 495. t. 37, f. 1.—Id. 8vo. p. 44.

Little Horn-Owl, Will. Orn. p. 101. t. 12.

Scops Eared-Owl, Lath. Syn. i. p. 129.—Id. Sup. i. p. 43.

It is with pleasure we have to announce this species of Owl as having been occasionally shot in Great Britain within these few years, upon undoubted authority. Mr. Foljambe, of Osberton, an accurate Ornithologist, assures us that he has a specimen in his collection that he believes was shot in Yorkshire; and that Mr. Fothergill, of York, has another which was shot in the spring of 1805, near Weatherby, in that county. Mr. Foljambe further remarks in a letter to the Author, that he has heard of others which had been seen in the same neighbourhood.

This species is about the size of the Little Owl, *Strix passerina*. Length seven inches and a half. The bill is black: irides yellow. The whole plumage is variegated with dusky, rufous, brown, and grey; on the upper parts the brown predominates; on the under parts the grey: the quills are transversely barred with rufous-white: the legs are covered to the toes with rufous-grey feathers, spotted with brown: the toes and claws are also brown.

The feathers termed the ears appear to be very indistinct in a dead bird, being very short, and composed of three feathers on each side of the head.

From the size and general resemblance of the Scops and passerine Owls, it is not unlikely they are frequently confounded, especially as the longer feathers on the head of the former are not at all times discoverable, and that both are subject to considerable variation in plumage. Buffon, who probably had frequent opportunities of examining these birds, especially the Scops, which is plentiful in France, says, the irides of the Scops is of a deeper yellow, and the bill entirely black,

which in the other is brown with the tip yellow. The plumage is also dissimilar; the number and regular disposition of the white spots on the wings and body are wanting.

As the Scops appears to be a migrative species on the continent, coming with the Swallow into France, and re-migrating about the same time that bird takes its departure, it is rather surprising no naturalist has till lately identified the species in England. As the Scops have been known to assemble on the continent in parts where field-mice abound, in order to prey upon them, it has been suspected, that a similar occurrence mentioned by Dale, in his Appendix to the *History of Harwich*, must have been this species. With this persuasion, Buffon relates the circumstance as belonging to the history of the Scops; whereas there can be no doubt it was the short-eared Owl, *Strix brachyotos*, a bird (in some respects) of similar habits. Dale, from Childrey, says, "In the year 1580, at Hallowtide, an army of mice so over-run the marshes near South Minster, that they eat up the grass to the very roots. But at length great number of *strange painted Owls* came and devoured all the mice. The like happened in Essex in 1648."

Dale ascribes this to the long-eared Owl, but we conceive he is equally mistaken in the species. It will be recollected by the Ornithologist, that *Strix brachyotos* is of more modern discovery identified as a species; about which there has been various opinions. To Mr. Pennant, we believe, science is indebted for the first specific distinction of that bird. Buffon, it is true, knew something of the Short-eared Owl, but not having noticed the auricles, he described and figured it as the Brown-Owl, *La Chouette, ou Grand Cheveche, Planch. Enl.* 438.

The same confusion which has attended this bird from its earliest discovery, will be handed down by all Translators and

and Commentators of Buffon's works. Even in the last edition of Smellie, by Mr. Wood, we find a very good representation of the short-eared Owl given for the Brown Owl, considered as destitute of auricles. In a late edition of Pennant's British Zoology, a variety of the Tawny Owl is still inserted as a distinct species, under the original name of Brown Owl.

If the Scops retire from France at the same time as the Swallows, it is highly improbable they should come into England in November, the time that the *strange painted Owls* (related by Dale) appeared in such number. We must rather look for such autumnal migrations northward, as we do for those of the vernal southward; and we know of no species of Owl which visits Great Britain in the autumnal season, with certainty, or in any number, but *Strix brachyotos*: and we have recent accounts of this species assembling in different parts of England to wage war against an overgrown colony of mice, which would otherwise become the scourge of mankind. Vide Owl-short-eared.

OWL-SNOWY. Strix nyctea.

Strix nyctea, Lin. Syst. i. p. 132.—Faun. Suec. No. 76.
Gmel. Syst. i. p. 201.—Ind. Orn. i. p. 57.
Le Harfang, Buf. i. p. 387.—Pl. Enl. 458.
Strix alba freti Hudsonis, Bris. i. p. 522.—Id. 8vo. p. 152.
Great White Owl, Edw. ii. t. 61.
Snowy Owl, Lath. Syn. i. p. 132.—Arct. Zool. ii. No. 121. t. Front.

We are happy to be enabled to add this species to the catalogue of British birds upon the best authority. Mr. Bullock, to whom we are obliged for this information, says he received a specimen from Norwich about two years since, with an assurance of its having been killed in that neighbourhood. But this naturalist, by a perseverance in the pursuit of

of natural objects, (to obtain which neither trouble nor expence is spared, as the most extensive collection now in the kingdom will evince) has been fortunate enough to discover that the Snowy-Owl actually breeds in the more northern part of these realms.

In a tour to the Orkney and Shetland islands, Mr. Bullock was informed on his landing at North Ronaldshaw, on the 3d of July, 1812, that a large white bird, with a head like that of a cat had been seen on the island for upwards of a month; and in consequence of a gentleman of the island assuring him that he had seen the bird (which he described to be as large as a Goose) the evening before, he determined to lose no time in pursuit. The place where this Owl was always seen is a rabbit-warren, called the Links, to that place therefore Mr. Bullock, in company with two other persons bent their course, and found the bird exactly in the place it had been so often seen. It was on the ground contiguous to the shore, and doubtless frequented the warren for the sake of making a prey of the rabbits. The bird suffered Mr. Bullock to approach within forty yards, and by means of a glass he minutely examined it, and discovered that it was a male by its being of an immaculate white. When it rose it was fired at, but unfortunately was not stopped, and it flew about a mile.

A reward being offered, all the guns in the island were put in instant requisition, and the consequence was that by being repeatedly shot at by bad marksmen, the bird flew at last from the island, in the direction of the isle of Sanda.

It appears that the female *nyctea* had been shot on the island a few weeks before, and plucked for the sake of the feathers, this was mottled with brown.

Upon visiting the isle of Westra a few days after, Mr. Bullock was informed that a similar bird had been seen there a few days before on a rabbit-warren.

In

In Shetland Mr. Bullock was more successful, for in Unst, the most northerly of the islands, he not only procured a specimen of the Snowy-Owl, but found that it bred as well there as on the neighbouring isle of Yell.

From the observations of this gentleman it appears, that this species of Owl preys in mid-day, as well perhaps as in the morning dawn or dusk of the evening. This circumstance is not singular, since the short-eared Owl and some others do the same.

It does not conceal itself like most of the genus, but prefers resting upon the ground, where it can look around, and perceive the approach of an enemy; and when roused it flies slow and heavily.

We do not recollect that this hardy bird, which braves the winters of the polar regions, has ever been before noticed to breed so far south as that of Shetland. It has generally been esteemed an Arctic species, residing the whole year amongst the glaciers and snowy mountains, where, except the White Bear, the Arctic Fox, the Ermine, and the Ptarmigan, scarcely any thing living is to be found in the colder months. Mr. Pennant says it is common in Hudson's Bay, in Lapland, and in Norway. In Sweden is said to prey upon the Ptarmigan and Alpine Hare, whence the Swedish name *Harfang*.

It has been generally supposed, that the Snowy Owl changes it plumage with the season, and that the snowy whiteness of its colour, observable in the winter, was thrown off on the approach of the warmer months, in exchange for that of a mixture of brown and white. From the observations of Mr. Bullock, this is not strictly true, since in the early part of July, this bird was noticed of a pure white, as far south as the Orknies, in latitude 59. The female indeed was mottled, and possibly the young male birds for a year or two may

may not be pure white, but they may become whiter in their autumnal moulting.

This noble species rather exceeds the size of the Eagle-Owl, *Strix bubo*, being nearly two feet in length, and sometimes weighing above three pounds.

The bill is black: irides yellow. The plumage varies from pure white to that of being marked on the head with small brown spots, and with narrow lines of the same, transversely placed on the back, and under the wings on the sides: the quills are also spotted with brown, as well as the feathers of the tail: the legs and toes are covered with close white feathers: the claws are black very large and much hooked.

PHALAROPE-BROWN. Vide Phalarope-red.

PHALAROPE-GREY. Phalaropus lobatus.

Phalaropus glacialis. Ind. Orn. ii. p. 776.
Tringa glacialis. Gmel. Syst. i. p. 675.
Plain Phalarope. Arc. Zool. ii. No. 415.
Lath. Syn. v. p. 173.

The rare appearance of this species in Great Britain has not allowed us to examine it at different seasons of the year, but from the plumage of three specimens, sent to us at different times in the autumn of 1812, it appears that the young, if not the old birds, undergo a change of plumage at that season. What the colour of this bird is in its breeding dress, has not, we believe, been clearly recorded, as we cannot find any account of it in the breeding season, nor of its nest or eggs. It is however evident, that the young birds, at first, have none of that fine cinereous-grey on the upper parts, from which its name has been taken; instead of which the feathers are more or less black, margined with dull yellow, or rufous; the coverts of the wings are dashed with cinereous,

and

and have their margins pale yellowish, the lower series nearly white. In this state it is the Plain Phalarope of the *Arctic Zoology*. We are indeed told, that the toes of that species are bordered with a plain or unscalloped membrane; but we have shewn, in a variety of the following species (which we conceive to be the Brown Phalarope of the same work), that the lobated membranes of the toes are not obvious in dried birds of this genus. It requires much nicety to preserve this character in drying; for if they are not pinned out in a moist state, the lobes, or scallops, fold underneath, leaving only a plain margin, and are so thin and delicate as to pass unnoticed.

A variety of the Grey Phalarope now before us, was shot towards the latter end of October, which clearly demonstrates the changing its plumage from the *glacialis* to the *lobatus*, possessing a sufficient number of cinereous feathers on the back and scapulars, to shew that it really is the *lobatus*, besides having been shot in company with another further advanced in its winter plumage.

Whether, as in many aquatic birds, the old ones of this species change their grey plumage immediately after breeding and become dusky and rufous above, like the young, we have not the means of ascertaining; but we are rather inclined to believe, that those which appear with us in the autumn, in the dusky plumage, more or less, are the young only, varying by having been hatched sooner or later in the preceding summer.

We have now under examination four specimens in the different gradations of change, from the commencement of the first moulting to the most perfect state of grey plumage.

The single instance on record of the Plain Phalarope of Mr. Pennant (which we consider as the grey species in its

nestling

nestling plumage), was taken in the Frozen Sea, lat. 69½, long. 191½; but by whom or in what month we are not informed. It is evident, however, it must have been in the summer, for our navigation so far north is obstructed by the month of September.

In one of the four specimens alluded to, there are only a few of the recently moulted grey feathers on the back and scapulars, mixed with the dusky ones, that make it vary in the least from the Pennantian species. But in order to give others a comparative view, we shall transcribe the description of the Plain Phalarope from the *Arctic Zoology*, and afterwards that of its first change, which indicates the species to which it really belongs.

"With a slender black bill, dilated at the end: crown dusky and dull yellow; across each eye a black line: cheeks and fore part of the neck pale clay-colour: breast and belly white; back and tertials dusky, edged with dull-yellow: coverts, primaries, and tail, cinereous; the last edged like the tertials: legs yellowish: toes bordered with a plain or unscalloped membrane."

Such is the description given by Mr. Pennant, and copied by all succeeding authors.

The following is a description of the bird before us, just commencing its first moult. The whole upper part of the head, back of the neck, upper, and lower parts of the back under the wings, and rump, black, more or less margined with dull-yellow or rufous, except on the back of the neck, which is plain: the middle of the back and scapulars are partly of the same colour, but mixed with some plain cinereous-grey feathers: the coverts of the wings dusky, tinged with cinereous, partly margined with pale rufous, and partly white: the forehead and cheeks are white, with a tinge of yellow on the latter: across the eye, or rather behind it, is a black stroke: the whole under parts white, except the neck,

neck, which is of a pale clay-colour: the tertials and tail-feathers edged with yellowish-white.

In another specimen further advanced towards maturity, the crown of the head is more mixed with white, and the back has less of the rufous margined feathers, and more of the cinereous-grey, but there remains of the former, three lines down the back, besides a few such feathers scattered on other parts: the neck before has also less of the clay-colour: the legs are flesh-colour, tinged with yellow on the inside; the outside dusky; the webs partly dusky, partly yellow.

In the genus Phalarope there are some characters which have not been generally known, by which they might be always discriminated from Sandpipers, independent of the feet. The plumage is much thicker on the under parts, similar to most truly aquatic birds, and notwithstanding the tail is longer than most Sandpipers, the under coverts are numerous and extend quite to the extremity: the bone of the leg is also more compressed than in the Sandpipers.

PHALAROPE-PLAIN. Vide Phalarope-grey.

PHALAROPE-RED. Phalaropus fulicaria.

We have before mentioned, that this bird had been observed in the Orknies in considerable abundance in the summer, and that no doubts were entertained of its breeding there, although the nest had not been found. To Mr. Bullock therefore we are indebted for the further elucidation of the natural history of this elegant little bird. In a letter to the author, this gentleman says "I found the Red-Phalarope common in the marshes of Sanda and Westra in the breeding season, but which it leaves in the autumn. This bird is so extremely tame that I killed nine without moving out of the same spot, being not in the least alarmed at the report of a gun. It lays four eggs of the shape of that of a Snipe, but much less, of an olive colour, blotched with dusky.

It swims with the greatest ease, and when on the water looks like a beautiful miniature of a Duck, carrying its head close to the back, in the manner of a Teal."

Mr. Bullock further observes, that the plumage of the female is much lighter, and has less of the rufous than the other sex.

A variety of the Red Phalarope was shot in the autumn of 1812, on a lake in Yorkshire, belonging to Mr. Danby, of Swinton, whose game-keeper had unfortunately stuffed and baked it before it was sent to an ornithological friend, Colonel Dalton. In drying, the lobated membranes that margin the feet (the usual character of distinction between the two genera *Phalaropus* and *Tringa)* had so contracted, as not to leave the smallest vestige of them; and as the plumage is so essentially different from either of the Phalaropes, and from any described species of *Tringa,* it became an object of more close investigation. With the description of the bird accompanied by a very elegant drawing, executed by Mrs. Dalton, we were favoured, and we are not surprised that the bird should have puzzled any naturalist who might not have had the means of comparison, (for the Red-Phalarope was not in the Colonel's collection). The connecting membranes between the toes were all that were discoverable, but those, some of the Sandpipers possess more or less. In the hasty drying another difficulty was occasioned, by the bill being considerably incurvated. Upon a comparison, however, of the drawing, with the Phalaropes, to which we were led by the feet, which were represented to have a connecting membrane between the middle and each of the interior toes, more than usual in the *Tringa* genus, we had reason to suspect, that as the shape of the bird, the slenderness and length of the bill, and toes, corresponded so closely with the Red-Phalarope, that upon soaking the feet of the bird in water, the marginal lobes would be found, and which we are assured was the result

result. This circumstance (however trifling it may appear to some,) shews how easy it is to be deceived in dried or ill preserved birds, by those who not knowing better, have destroyed the little discriminating character they possess, and evinces how necessary it is for naturalists to minutely investigate.* The bird in question is probably a female in the first plumage, as the whole under part, from the chin to the under tail coverts is white, except the breast which is faintly mottled with pale ferruginous; the crown of the head dusky-black, with a few white spots on the top: the forehead and cheeks white, the latter with a long black mark behind the eye, taking in the coverts of the ears; at the anterior corner of the eye is also a little black: the back of the neck pale brown: the back and scapulars black, with a slight purple gloss, the former margined with rufous, the latter edged with white: the wings and tail appear to be nearly the same as usual in this species.

This is an interesting variety of the Red Phalarope, because it comes so near to what has been described as a distinct species, under the title of Brown Phalarope, *Phalaropus fuscus*, that we have very little doubt the synonyms ought to be brought together.

Mr. Pennant appears to have first described the Brown Phalarope from a specimen which flew on board a ship off the coast of Maryland, and he refers to a figure in Edwards. Long received as a good species, the same description has been transcribed into other works.

In the *Index Ornithologicus*, ii. 776, will be found the following synonyms:

Tringa fusca. Gmel. Syst. i. p. 675.

Phalaropus fuscus. Bris. vi. p. 18. 3. Id. 8vo. ii. p. 363.

---

*This occasioned the Plain Phalarope of the Arctic Zoology to be made a distinct species, whereas it is only the young of the Grey species.

Fulica fusca, rostro tenui. Klein. Av. p. 151. 3.
Coot-footed Tringa. Edw. t. 46.
Brown Phalarope. Arct. Zool. ii. No. 414.
Lath. Syn. v. p. 274. 4.

The description in the *Arctic Zoology* is as follows. "With a slender black bill, a little bending at the end: crown black: cheeks and neck of a light ash-colour, tinged with bloom-colour; breast and belly white: back, wings, and tail, dusky; greater primaries and greater coverts tipped with white: legs like the Red Phalarope." Mr. Pennant adds, that the form of the bill is a specific distinction from the Red species.

The stress which this naturalist appears to have laid on the trifling curviture of the bill, which he considers as a specific distinction, is by no means to be depended upon in dried birds; for, in the act of drying hastily, all slender and soft bills become more or less flexuous by partial contraction. It was this circumstance, as well as the non-appearance of lobes on the feet, that caused a momentary hesitation in identifying the variety or young of the Red Phalarope above-mentioned, which was communicated to us by Colonel Dalton, and which we really think is so nearly allied to the Brown Phalarope of Mr. Pennant, as to require their being brought together.

PHEASANT-COMMON. Phasianus colchicus.

It has been previously remarked, that the female of this species occasionally assumes the plumage of the other sex, as well in the wild state as in confinement, and that after such a change it becomes barren. Additional proof of this curious circumstance has been communicated to us by Mr. Foljambe, of Osberton, in Nottinghamshire, to whom we are obliged for a fine specimen of a male-plumed female, killed in December, which he received from the Duke of Newcastle, and sent to us for dissection. This bird has very much the

appearance

appearance of a male, except that the purple-blue tips to the feathers on the breast are much smaller, and the feathers on the back are destitute of the buff or cream-coloured margins. It has no apparent auricular tuft of feathers on each side the head, nor spur on the legs, and the space round the eye is covered with feathers. In size it is rather superior to the female Pheasant in the usual plumage, and its tail is longer, the two middle feathers rather exceeding eighteen inches. It weighed two pounds and a half, and measured two feet nine inches in length.

This bird was dissected, and the parts of generation carefully examined. On the left side of the *rectum* the *uterus* was observable as usual, and was easily traced to communicate with the *ovaries*, or usual receptacle of the *ova*, by what is considered to be the *oviduct*. There was not the smallest appearance of *ova*, although the *uterus* was very evident, but in a contracted state. The site of the *ovaries* was examined with a lens, without discovering any embrio *ova*; but what appears most extraordinary is, that the communication between the *vagina* and the *uterus* was interrupted; a collapsion had taken place, and the membrane at that part was considerably thickened.

From these appearances it would be reasonable to conclude this bird had never laid eggs; but as we are unacquainted with the origin of this extraordinary change in plumage, we dare not venture to hazard an opinion, as to what would be the appearance of a bird under similar circumstances of plumage, that had been known to have been prolific. We may, however, be assured, that whatever is the cause of sterility, to that also must be attributed the change of plumage, as inseparable consequences.

We have noticed in a hybrid female Duck, between the common species and the Muscovy, all the obstructions to

 propagation

propagation, extremely similar to what is here related, which accounts for the want of inclination to breed.

PLOVER-STONE. Vide Plover-ring.

PRATINCOLE-AUSTRIAN. Glareola Austriaca.

It will have been observed in the preceding pages, that this bird was first introduced into the British catalogue by Mr. Bullock, from a solitary instance of its having been shot near Liverpool. We have now to record, that the same gentleman met with the Austrian Pratincole in the summer of 1812, in Unst, the most northern of the Shetland isles, an account of which will appear in Vol. x. of the Transactions of the Linnean Society.

SANDERLING. Charadrius Calidris.

Charadrius rubidus, Ind. Orn. ii. p. 740.—Gmel. Syst. p. 688.

Ruddy Plover, Arct. Zool. ii. No. 404.—Lath. Syn. v. p. 195.

As we extend our researches into natural history, nature is found to gradually unfold her secrets to us. It is not enough that we set down quietly and invoke her to invert the *cornu copia* over our heads; or take for facts all that have been handed down to us. It is by our own perseverance and industry, that light is extracted from darkness, and the ways of nature become developed.

Our more recent knowledge of ornithology, evinces the necessity of tracing each species to its retreat in the different seasons, and there examine the changes that have taken place since it departed from our own country. It is not sufficient that we identify the species when we see it return to our climate, and when the usual annual mutation in plumage

plumage has been performed; we must go farther; every month produces an alteration in some species, and a single new feather will frequently lead to discovery.

It will be seen that the Sanderling has already been described as subject to very material changes, but no one suspected that the plumage of the young, and perhaps of the adult in the breeding season, corresponded so nearly with what has been described as a distinct species under the title of *Charadrius rubidus*, that there can be scarcely any doubt of their being the same.

The bird we are about to describe was shot by Mr. Bullock the latter end of June, 1812, in the most northern part of Scotland.

The length is eight inches: the whole upper part of the bird is ruddy, or rufous, in some parts bright ferruginous, spotted with black. But to be more particular, the bill and legs are as usual in the Sanderling: the head and neck, taking in the cheeks and throat, are rufous, with very minute black streaks: the back and scapulars rufous, or ferruginous, with large black spots, the black occupying the middle of each feather, the margins rufous; on the scapulars the spots are largest; in some the black is divided by a ferruginous bar, so as to form two spots, but not observable unless the impending feather is lifted up; these are also tipped with white: the rump is like the back: the lower breast and from thence to the tail is white: the prime quills are dusky, the secondaries the same, more or less white towards the base: the lesser coverts dusky-brown, the largest series more or less tipped with white: the middle feathers of the tail dusky, with rufous margins; the rest cinereous on the outer web, whitish on the inner, all becoming gradually paler as they recede from the centre, the outer ones being almost white.

As this variety of *Charadrius calidris* has no intermediate

feathers in its plumage that indicate a changing state, we have every reason to believe it to be actually the usual dress in which the species appear in the breeding season, and that no Sanderling will be found in any part of the world in that season, with the fine cinereous-grey back and scapulars, which adorn the adult during the winter months. It would indeed be scarcely credited, that two birds so extremely dissimilar could belong to the same species, had not experience taught us, that many such examples are within recollection. But what supersedes all, even the most reasonable speculations, founded on precedent, is ocular demonstration.

We have now before us four Sanderlings in different states of plumage, known to have been shot at different seasons. The rufous specimen or summer plumage, the grey or winter dress, and the two other intermediate stages that fairly connect them; one shot early, the other later in the autumn.

This is a forcible exemplification of the changes incidental to some species, in a bird well known, and should instruct the naturalist to thoroughly scrutinize those tribes of birds whose plumage is so extremely transient, and instead of straining to make new species from a trifling variation of feather, endeavour to trace all the gradations incident to season and age.

The Ruddy Plover was first described by Mr. Pennant, in his *Arctic Zoology*, as an inhabitant of Hudson's Bay, and was communicated to him by Mr. Hutchins.

The Sanderling does not appear to be known in northern Europe, for the reason that it is never seen there in the dress usually described by naturalists.

SANDPIPER-DUSKY.

Tringa Calidris, Lin. Syst. p. 252.—Gmel. p. 681.
Ind. Orn. ii. p. 732.
Dusky Sandpiper, Lath. Syn. v. p. 174.

Mr.

Mr. Bullock assures us, that he met with a bird in the Orknies, which he considers as the Dusky Sandpiper, of which a description will appear in vol. x. of the Transactions of the Linnean Society.

We have not seen the bird in question, but as we have long suspected that *Tringa calidris* and *Islandica* are trifling varieties of the same species, it is proper that we remark in this place that Mr. Foljambe presented us with a Sandpiper, which he assures us is exactly similar to Mr. Bullock's bird. That this is the *Calidris* of Linnæus, and the Dusky Sandpiper of the *General Synopsis*, we have not the smallest doubt; and also a variety of the *Islandica* of the Swedish naturalist, and the Red Sandpiper of Dr. Latham we most firmly believe.

It will be recollected, that another variety was originally given in the *British Zoology* for a distinct species, under the title of Aberdeen Sandpiper. In fact we understand, from those who have had an opportunity of examining several of these birds shot out of the same flock, that there is a considerable variation in plumage about the neck, back, breast, and belly; but that the wings, the tail, and its upper coverts are similar in all.

Some have described the Red Sandpiper to have the fore part of the neck and breast mixed with cinereous and rust-colour, obscurely spotted with black; while others, and amongst them Linnæus, say, the under parts are rufo-ferruginous.

The Dusky Sandpiper is generally described to have the under parts of the body chesnut. Now, when all the other parts of plumage so nearly correspond, as well as the size of the bird, and length of bill, who will draw the shade of difference between rufo-ferruginous and castaneous; or as some might call it bay, or bright ferruginous?

The fact appears to be, that when the under parts of the

body are more or less mixed with white or cinereous, such may be considered as not arrived at maturity; and that the full chesnut or ferruginous colour from the chin to the vent is the adult plumage.

From what has been said, it will be inferred, that we think the synonyms of the Linnæan Tringa *Calidris* and *Islandica* should be assimilated.

The size and form of the bird received from Mr. Foljambe, is very like the Knot; the bill, in shape and length, is similar; and the legs and toes are exactly of the same size. It is amongst the few of the genus whose bill is thick, and a little dilated at the end: its length is about an inch and a quarter to the feathers on the forehead; the crown, back part of the head, and hind neck, pale ferruginous, with dusky streaks; sides of the head, except the coverts of the ears, and the whole under part, from chin to vent, chesnut, with a few white feathers on the middle of the belly: behind the vent, and under tail-coverts, white, with a few dusky spots and a few ferruginous feathers: the upper part of the back and scapulars elegantly marked in spots and bars of bright ferruginous and black, the former being the margin to the feathers, and some have a slight edging of white: the lower part of the back concealed by the scapulars, the rump and upper tail-coverts are greyish-white, with small undulating bars of black: the tail-feathers are wholly cinereous, slightly margined and tipped with white, the six middle ones darkest, becoming dusky at the end.

A specimen of the Red Sandpiper, with which we have at this moment been favoured by Lord Stanley, for examination, is in a state of changing its plumage; in which we perceive so much of the Knot, *Tringa Canutus*, that we really begin to suspect the Dusky and Red Sandpipers will be found to be only that bird more or less in its summer plumage. We have before noticed similar

instances

instances in the Pigmy Sandpiper, Sanderling, and some others, that in the breeding season have much of a ferruginous colour, which wholly vanishes in the winter.

The shape of this bird, the size and formation of all its parts, are exactly similar to those of the Knot. The plumage above is a mixture of black and cinereous, with spots of white, and a few of pale ferruginous on the margins of some of the feathers; but these are interspersed with many plain cinereous feathers, like those on that part of the Knot: the head is cinereous, streaked with dusky, exactly like that bird in its first feathers, when it has been called the Ash-coloured Sandpiper: the back of the neck almost wholly cinereous: the fore part of the neck pale ferruginous, intermixed with white feathers, streaked with dusky, as in the Knot: the breast and belly pale ferruginous: the sides under the wings, the coverts of the tail, the quills, and their greater coverts, like the matured Knot: the tail-feathers exactly resemble those of the young Knot, being cinereous, the middle ones slightly bordered dusky, with an edging of white.

It is only by the examination of numerous specimens, collected at different seasons of the year, that we can expect a perfect arrangement of species in birds so changeable in plumage. The pale rufous or ferruginous of the under parts of this specimen, and the little appearance of that colour on the upper parts, indicate youth, and we have little doubt but that it is actually the young Knot in the early part of the autumn, or latter end of the summer of the second year, having partly attained its mature summer plumage, and for the first time is throwing out the plain cinereous feathers on the back, scapulars, and wings, as the mature winter plumage of the Knot.

With so many specimens under critical examination, suspicions had arisen, before we were favoured with that

from

from Lord Stanley, which has scarcely left a doubt that the Knot is no other than the Red Sandpiper in its winter dress.

SANDPIPER-LONG-LEGGED. Tringa grallatoris.
Tringa glareola. Lin ?—Wood Sandpiper, Orn. Dict.

Since the former part of this work passed through the press, we have noticed, that the Editor of the late edition of Pennant's *British Zoology*, in conformity to the opinion of Doctor Latham, has considered Tringa *Ochropus*, and *glareola* of Linnæus, as varieties of the same species; and he might also have added the *littorea* of the same author, which is undoubtedly the young of the Green Sandpiper. If these three birds really constitute but one species, and we presume it is out of the power of human abilities to prove they do not, from the laconic description the great Swedish naturalist has left us as a guide; then the Wood Sandpiper of the *Ornithological Dictionary* should receive another name, being as distinct from any variety of the Green Sandpiper, as the Common Snipe is from the Jack Snipe. In order therefore to prevent our Wood Sandpiper from being referred to in future for a variety of the Green Sandpiper in any of its mutations, we request that name may be erased, and substituted by the above, with only a doubtful reference to the *glareola* of Linnæus, a bird which will now remain for ever a matter of individual opinion.

For description, and further particulars, we refer to the *Ornithological Dictionary*, and to this Supplement, under the titles of Sandpiper Wood, and Green.

We have lately been informed by Mr. Foljambe, that the Long-legged-Sandpiper is in his collection, a specimen having been sent to him from the coast of Yorkshire, in the month of January of the present year.

Another bird of this species was shot at Woolwich, on the

the 16th of August, 1812, and is in the possession of Mr. Weighton, of London. The only difference we perceive between this specimen and that in our collection is, that the sides of the breast are rather more brown, obscurely spotted with sullied white: the tail is exactly similar in the markings, but the two outer feathers are of the same length, and not so long as the third or fourth; we may therefore conclude, that what we before remarked in our specimen, of the first feather being longer than the two succeeding, proves that part to have been newly moulted. In this specimen there is more than a usual gradation in length between the two first and the third, and consequently we may now fairly conclude, that both had cast the tail feathers in the autumn in which they were shot, and consequently are old birds, as young never moult those feathers in the autumn of the first year.

We take this opportunity of acknowledging Mr. Weighton's favour in sending us a specimen of this, and of the Pigmy Sandpiper, in a very interesting change of plumage, for examination.

It may be useful to collectors to be informed, that Mr. Weighton proposes to open a Repository for buying and selling subjects in natural history, and consequently through him, gentlemen may be assisted in their researches. The Repository is to be open for inspection, and orders for particular species registered at No. 2, Fountain-Place, City-Road, and collected as soon as possible. But of this intended plan the public will be informed by a prospectus.

SANDPIPER-PIGMY. Tringa pygmæa.

Pigmy Curlew, Lath. Syn. v. p. 127–10.

The following is a description of what we conceive to be a variety of that species which has hitherto been recorded as the Pigmy Curlew.

Length

Length nine inches: bill an inch and a half long, dusky-black, slender, rather compressed at the point, and slightly arcuated: the upper mandible a trifle longer than the under: irides dusky. The feathers on the upper part of the head, and the hinder part and sides of the neck are streaked with brown and grey, the former predominating: a whitish streak runs from the upper mandible over the eye; beneath that a brown one to the eye: the lower part of the neck behind, the back, and scapulars pale ferruginous and black, those of the last in broad bars or spots: the rump and upper tail-coverts white, barred with dusky-black: the coverts of the wings uniform brown, darkest along the shafts: the quills are dusky, their shafts partly white: the tertials are plain like the coverts: the edge of the wing below the *alula spuria*, is minutely speckled with brown and white: the chin and throat white, with a few scattered pale ferruginous feathers: fore part of the neck whitish, streaked with brown, interspersed with ferruginous feathers: the breast and belly, as far as the legs ferruginous, each feather prettily marked with a slender, undulated, transverse line of dusky, near the end; behind the legs the feathers are white, many having a brown bar running into an angle on the shaft: the under tail-coverts pure white: the tail is even at the end, the feathers plain cinereous, with white shafts: the legs an inch and a quarter in length to the knee, which, with the bare space above the knee, of nearly half an inch, dusky-black: toes and claws of the same colour, the latter almost straight.

This very interesting bird was shot at Holyavon, on the 26th of August, 1812, by Mr. Lenard, and was sent to Mr. Weighton, who, at the request of Mr. Foljambe, was good enough to send it to us for examination, as it appeared to be an undescribed species of *Tringa*.

The first appearance of this bird impressed upon our mind all

all the characters of what has been called the Pigmy Curlew, and upon a comparison with that species in our museum, we have no doubt of its being the same, notwithstanding the ferruginous plumage it has acquired. This specimen is highly interesting, because it appears to be an adult in moult, obtained at that season of the year when a part of its summer plumage was yet retained, and consequently we have an opportunity of forming a pretty correct idea of its colour during the breeding season.

It will be observed that we have in the preceding pages remarked, that the Pigmy Curlew in our collection is evidently young, by the white margins on the feathers upon the back, scapulars, and coverts of the wings.

Another specimen (recently killed, and communicated to us, by Mr. Foljambe, in whose collection it is) appears to differ but little from ours, except in a few slight particulars, but it is worth describing, as by knowing the time of the year this was shot, we are enabled to communicate the appearance of the bird in its first autumnal plumage, for such we believe it to be.

"This bird" says Mr. Foljambe in a letter to the author "was shot in Kent, on the first of October, 1812. The length is nine inches: the bill one inch and a half long, black and incurvated: the crown and forehead dusky, with a slight mixture of cinereous: over the eye a whitish line: cheeks, and back of the neck cinereous, with faint dusky streaks: the feathers of the back and scapulars olive brown, mixed with dusky, and faintly margined with very pale yellow: the coverts of the wings dusky, with broader margins of the same yellow: quills black: chin and throat white: breast pale cream-colour: belly, sides, vent, rump, and tail coverts white: the feathers of the tail pale cinereous-brown, with the shafts and the extremities margined with white. Legs dusky-black.

In

In this specimen we also find the same indicative of immaturity, the pale margins to the feathers, as in that in our collection. In the adult no such appears, and we have no doubt but that in the height of the breeding season, the throat and fore part of the neck, as well as the breast and belly are ferruginous, because we observe many feathers of that colour still retained in the old bird, which in another month would have been thrown off. The upper tail-coverts being barred, we could not have suspected, but whether this is a permanent character in adults, or like the ferruginous plumage is changeable with the season, we have yet to learn.

It will be recollected that the description originally given of this species, in the *General Synopsis*, was taken from that recorded to have been killed in Holland, in which the head, back, and coverts of the wings, are mixed with brown, ferruginous, and white. In the specimen shot at Sandwich, described by Mr. Boys, and now in our collection, there is no ferruginous on those parts, although the head and neck are rufous-brown. Here then we have three gradations. The Holland specimen had moulted more of its ferruginous feathers than the one above described; and the Sandwich bird is evidently in its infant plumage.

The natural history of this rare species is but little known, for, like most of its congeners, it only occasionally visits us, and retires to a less inhabited part of the northern world to breed. It is only by slow degrees that we are enabled to ascertain the highest state of perfection in plumage of such migrants. From this circumstance, and from consulting the general plumage alone, without regarding the more prominent characters, species are greatly multiplied beyond their natural limits. We cannot therefore too frequently repeat, that many birds are so metamorphosed in their breeding plumage, that they are not to be recognised in all the changes incident

incident to season, by plumage alone, without minute investigation. It should also be remembered, that spotted plumage, especially where the margins and tips of the feathers are paler, and marked with lines and spots, are suspicious characters of immaturity. It is a great object to obtain these migrative species as early as they appear on our shores in the autumn, and as late in the spring as possible before they retire to their breeding places. By this means only can we procure them in moult, and detect their approaching changes: the appearance of a few feathers different from what we find in their winter dress, leads to extensive knowledge. It is highly essential that when such birds are captured, the dates should be registered as well as the sex.

Just as this sheet was going to the press, we had an opportunity of examining a specimen of the Pigmy Sandpiper, in nearly its highest state of summer plumage. It will now be seen that our conjecture, with regard to the colour of this bird in the breeding season, has been completely verified.

In this specimen the whole upper parts are more or less ferruginous, mixed with black; the forehead and chin are grey; the crown of the head dusky-black, mixed with grey; the back of the head is slightly hoary, or powdered with grey, these slender feathers having their tips of that colour; the hinder part of the neck and upper part of the back ferruginous, with streaks of black: the lower back and scapulars deeper ferruginous, some of the feathers having sagitate spots of black in the middle, others barred with black; and some are black, deeply scalloped with ferruginous; the rump is brown: the fore part of the neck and throat bright ferruginous, powdered with grey, like the back of the head; breast and belly ferruginous, the latter becoming paler in the middle, the feathers being tipped with white, and some have a small transverse dusky bar; the upper and under coverts of the tail and sides of the vent rufous-white, with a

few

few black bars; the lesser coverts of the wings are brown, those near the tertials with rufous margins; the greater coverts immediately impending the prime and secondary quills are tipped with white; quills dusky, the shafts partly white, and the secondaries becoming whitish towards the base: the tertials margined with ferruginous: the tail, as well as the bill and legs, like the last described.

We consider ourselves extremely fortunate, in having been able to trace this obscure species through all its variation in plumage, from the first or infant state, to that of the adult in its perfect summer dress; a circumstance that could not be effected but by foreign communications, for the Pigmy Sandpiper does not breed in any part of these realms.

To Mr. Bullock, proprietor of the London Museum (a Gentleman of indefatigable assiduity in collecting subjects in natural history from all parts of the world), we are indebted for enabling us to describe the summer plumage of this species, which we identified amongst some skins sent to us for examination. It appears that this specimen came from Hudson's Bay, and consequently we obtain the knowledge that it is an American as well as an European bird.

Knowing how much this class of birds has been injudiciously multiplied, we are surprised that none of the varieties of this bird should have been recorded as distinct species, for at present we are not able to affix to them any synonyms; a circumstance that should indicate the scarcity of the species, or at least its rarity in the more habitable parts of the world. A material point is however now acquired, with respect to the natural history of this bird, as we may be certain that it breeds in the neighbourhood of Hudson's Bay, and consequently we have a clue to the attainment of all that belongs to its history.

So great a dissimilarity between the young and the adult, in its breeding plumage, would scarcely have induced a belief

that

that they were actually the same species, had it not been for the gradual change perceived in those specimens killed at different seasons.

It is remarkable, that rufous and ferruginous appear to be either a character of maturity or incidental to the season of love, in this and one or two nearly allied genera, and we should not be in the least surprised, after what we have already discovered, if some other species, which are only known to us in their winter dress, should hereafter be found to be equally dissimilar in their summer plumage as this and several others described. It should be recollected by the scientific ornithologist, that the Ruff has been multiplied into, perhaps, ten different species. The Purre is lost in the summer, by being converted into the Dunlin; the Sanderling is probably changed into the Ruddy Plover at the same season, and the Grey Sandpiper becomes obscured in the plumage of the Swiss Sandpiper. These and many other similar changes, mentioned in the course of this work, will evince the caution required in the discrimination of birds by plumage alone.

SANDPIPER-RED.

For further remarks on this species see Sandpiper-Dusky of this Appendix.

SANDPIPER-SWISS. Tringa Helvetica.

It will be observed, that in the preceding pages we have not scrupled to bring the Swiss and the Grey Sandpipers together, as one and the same species, for which our reasons have been sufficiently detailed. We had indeed almost despaired of detecting the *Tringa squatarola* in this country so late in the season as to have allowed it to assume that plumage in which it was by Linnæus, and by all succeeding

succeeding writers since the time of that great physiologist, considered as a distinct species, and described under the title of *Tringa Helvetica*. By some unusual cause, however, several of this species were detained so long upon our shores in the spring of the year 1812, that no less than six or seven were bought in the London market on the 12th of May, just as they had arrived out of Norfolk. Several of these birds came under the inspection of Mr. Foljambe, who has kindly informed us they were greatly dissimilar in plumage, by possessing more or less black. Of one which was the blackest, and which proved to be a male, Mr. Foljambe had a drawing made, by that eminent artist Mr. Edwards, with which we were favoured, together with a full and correct description.

It should appear, (as was natural to suppose in birds subject to change their plumage with the season) that either all these birds had not arrived at perfection in their summer dress, or that age or sex, occasioned such variation.

For the benefit of the British Ornithologist, we transcribe the more essential part of Mr. Foljambe's accurate description of a male specimen, apparently in its full courting attire.

The length about eleven inches and a half: irides hazel: the bill nine eighths of an inch long, and of a black colour: forehead white: crown and back of the head dirty-white, confusedly spotted with black; over the eye a white line extending to the back of the neck, which last is of a greyish mixed colour: at the base of the bill, for an extremely narrow space, is black, which running backwards encompasses the eyes; the back and scapulars spotted with black and cream-colour, the margins of the feathers being of the latter colour: the wing coverts similarly marked with black and white, but the white is more predominant: spurious wing black: greater quills deep dusky: lesser quills the same, slightly margined with cream-colour: rump and upper tail-coverts edged like the last: the tail white, with several

transverse

transverse bars of dusky: the lower part of the cheeks, throat, sides of the neck, breast, and belly, as far as the thighs, black; but at the sides of the neck the black and white feathers are irregularly blended: the thighs, vent, and under tail-coverts white: the legs, toes, and claws, as usual in the Grey Sandpiper.

It is by no means singular, that this species of *Tringa* should partly change its plumage in the spring and autumn; the same is observable in the Turnstone, in one state of which that bird has been described as a distinct species, under the title of Hebridal Sandpiper. The Dunlin changes in the spring, from pure white beneath, to more or less black. The Dotterel and Ring Plover have also a partial change, becoming blacker in the spring: numerous other instances might be mentioned.

SNIPE-JADREKA.

A bird from Lord Stanley's collection, lately sent to us for inspection, has so much of the intermediate plumage between the Jadreka Snipe and the Red Godwit, that we cannot see how these can any longer be separated as distinct species.

Knowledge arrives by slow degrees. Supported by the opinion of other naturalists, we had supposed sufficient distinction was observable in the specimens our own collection afforded, as will be seen under Snipe Jadreka in this Supplement. But it will also be observed under the title of Godwit-red of this Appendix, that by an examination of some specimens with which Mr. Foljambe favoured us, our opinion began to waver. The present specimen from Lord Stanley, possesses so much of the intermediate plumage, that we have no longer any doubt of their being the same.

This has the bright ferruginous neck and breast; on the latter are a few pale feathers, with brown tips, not yet

changed: on the back many of the feathers are plain cinereous-brown, like the original Jadreka; but these are mixed with others that are black, with ferruginous margins: all the coverts of the wings are plain cinereous-brown; and in every other respect it is so exactly similar to the original Jadreka Snipe, that we can only consider it to be a bird in that state of change which connects the *Lapponica* with the *limosa*.

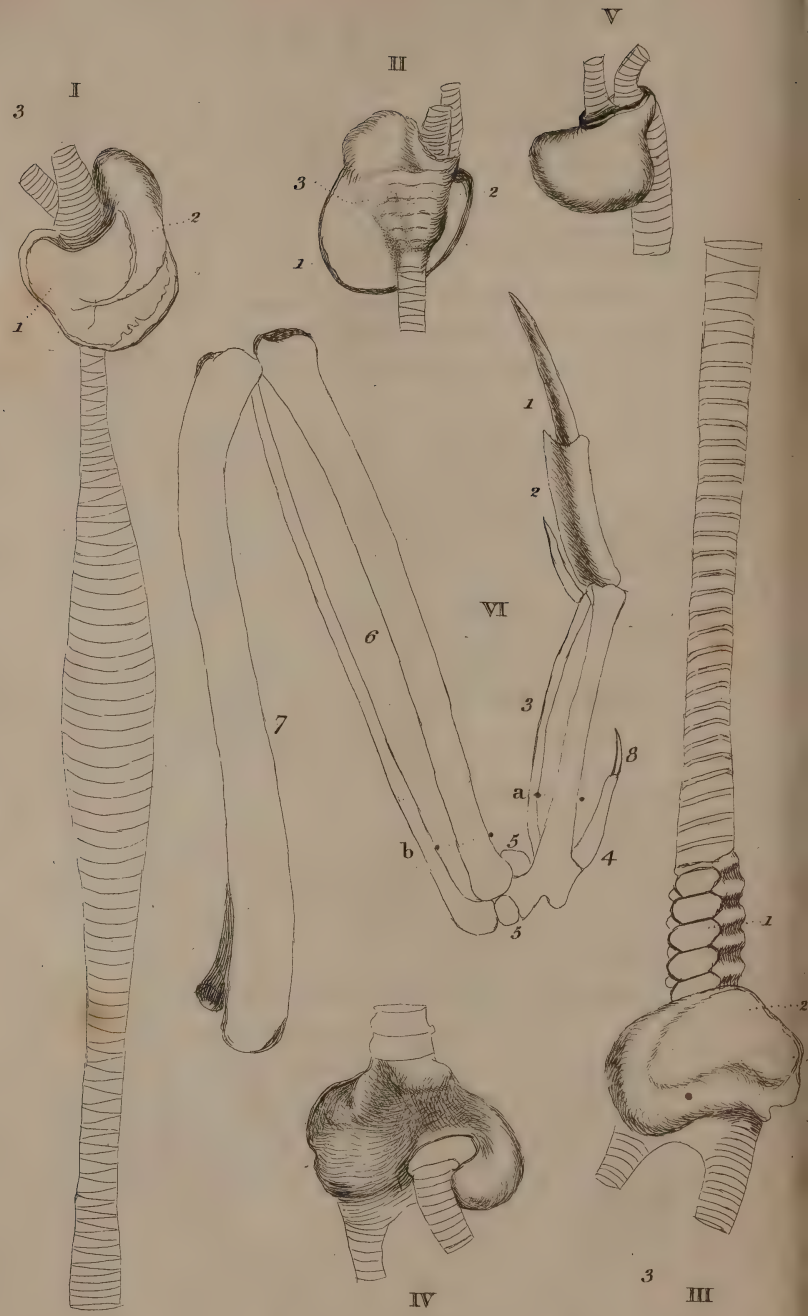
We rejoice in having an opportunity, though late, of offering our more mature opinion upon a subject of so much intricacy.

SNIPE-RED-BREASTED. Scolopax Noveboracensis.

Since the former part of the work went through the press, we received a specimen of the Red-breasted Snipe from Mr. Foljambe's museum for examination, that differs in nothing essential from those before described. This was shot in May 1812. Another specimen from the same gentleman, shot in December of the same year, on the Yorkshire coast, has the ferruginous margins of the feathers on the back and scapulars very pale, some almost white: the head and neck are paler than described in the former birds; but what is most interesting in this specimen is, that the ferruginous feathers of the breast are mixed with a few that are white, each having one or two transverse dusky bars; and upon lifting up the ferruginous feathers on the neck, a few white ones are discernable, with a dusky streak down the middle. This discovery indicates a change of which we were not before aware; and we now suspect those feathers to be the remains of the plumage of the young, previous to the first moult.

From Lancashire, another specimen has come under examination, corresponding with the original description. This had been mistaken for the Red-Godwit being marked *Scolopax Lapponica*.

Definition


I
3
2
1
II
3
2
1
V
VI
1
2
3
8
a
b
5
4
6
7
1
2
3
III
IV

Definition of the parts of extraordinary tracheæ, belonging to some species of aquatic birds,

WITH REFERENCE TO THE ANNEXED PLATE.

THE *trachea* or *aspira arteria*, (as the windpipe is scientifically called) is in some species of aquatic birds of a most singular structure, posessing an enlargement at the bottom, which has been termed a labyrinth. This labyrinthic part is of essential use to the ornithologist, in discriminating the species, as well before their arrival at maturity, as in the several changes of plumage incidental to season. With a view to promote a discovery so essential, we shall propose to fix names to the several parts, in order to facilitate description.

In the labyrinthic part of the *trachea* there is a material difference in conformation, which forms two natural divisions, and as might be expected, belong to birds of very different habits; one is a structure found to obtain amongst the Diving-Ducks with short wings, and some other birds, that collect their food mostly under water, and as far as experience has gone, this line of separation appears constant. There are indeed one or two species which deviate somewhat from either division, but do not connect the two.

In order to explain this subject, we shall consider that the *aspira arteria* of such birds, consists of three principal parts, that is to say, the windpipe or *trachea* properly so called, the labyrinth or swelling at the lower extremity, and the *branchiæ* or divarications at the bottom, which connect the *tracha* with the lungs. The principal distinction in the labyrinth of the two divisions, is as follows:—

First,—that which is composed of two distinct parts, one a compressed chamber, more or less covered with a thin membrane, situated on the left side of the *trachea*, when in its

proper place within the bird, which is called the *tympanum*; at the back of which is another chamber, formed by the junction, and inosculation of the base of the true *branchiæ* the cartilaginous or bony rings of which are more or less united by ossification; a circumstance admirably exemplified in the labyrinth of *Anas marila*. This part has been termed a bony box; we shall, therefore, in some measure retain that name by giving it the title of *orca*, (from its being usually ribbed like a dice-box) or the exterior and interior *orca*. From the bottom of the exterior *orca*, the flexible part of the right branchial tube issues: the left branchial tube arises from the base of the *tympanum*, and is not in immediate contact with the interior *orca*, so that the respired air must first pass into the cavity of the *tympanum* in order to be received into the lungs. This is the labyrinth of the Diving-Ducks and Mergansers.

Second,—the labyrinth belonging to the Grovelling-Ducks is much more simple; it consists of either one or two subglobular bony chambers, which have been called *ampullæ*; a name we shall also retain.

In most species of this division there is only one *ampulla*, and that is situated on the left side; but in *Anas tadorna* there are two *ampullæ*, one on each side. Where there is only one *ampulla* the right *branchial* tube is connected with the *trachea*; the left proceeds from the base of the *ampulla*. Where there are two *ampullæ* the *branchiæ* are partly connected with the bony base of the *trachea*, and partly with the *ampullæ*, so that there is a free circulation of respiring air through those chambers.

The structure here described will be better understood by consulting the table annexed, with the index to the figures.

WITH A TYMPANUM, BUT NO AMPULLA.

In the division of aquatic birds with a *tympanum* to the labyrinth

labyrinth we find *Anas marila, ferina, fuligula, nyroca, glacialis*, and *clangula;* and *Mergus merganser, serrator* and *albellus*.

WITH ONE AMPULLA, BUT NO TYMPANUM.

*Anas boschas,** *clypeata, striperа, penelope, acuta, querquedula*, and *crecca*.

WITH TWO AMPULLÆ, BUT NO TYMPANUM.

Anas tadorna.

Description of the Figures in the annexed Plate.

I Trachea of *Anas nyroca*.—1, the *tympanum* of the labyrinth—2, the bony arch that crosses the *tympanum*—3, the *branchiæ*.

II Labyrinth of do. reversed.—1, the back of the *tympanum*—2, the exterior *orca*—3, the interior *orca*.

III Trachea of *Anas glacialis*.—1, the opening of the base covered by a transparent membrane—2, the *tympanum* of the labyrinth—3, the *branchiæ*.

IV Labyrinth of do. reversed, shewing the insertion of the *branchiæ*.

V Labyrinth of the Summer Duck, *Anas sponsa*, shewing the front of the *ampulla*. The bird to which this belongs is not properly British, but has been introduced by way of exemplification as the first time of its being figured.

VI Bones of the wing of the Whistling Swan, *Anas cygnus (ferus)*.

---

* What Professor Gmelin can have discovered in the Domestic Duck to have induced him to separate it from *Anas boschas* we cannot conceive. There is not the most trifling difference in the structure of the *trachea* and its labyrinth: the number of feathers in the tail, and the singular recurviture of the middle ones, are similar. They readily mix, and their produce are equally fertile, a circumstance at present, which alone amounts to almost positive proof of affinity. But it may fairly be asked, if the *boschas* is not the origin of the Domestic Duck, where is it found in its native state?

Direction for amputating the Wing of a Bird in a Menagerie.

Any thing that may tend to obviate cruelty in our amusements, cannot but be highly acceptable. To those who may have a menagerie or a decoy, or wish to preserve the larger birds in confinement, it may be useful to know how to perform amputation upon that part of the wing of a bird, which will effectually prevent its escape, in as expeditious a manner, and with as little pain and risk as possible.

The usual method in practice amongst that class of persons to whom such an operation is generally consigned, is, that of cutting off a portion of the wing by a strong pair of scissars or shears, and then with a red-hot iron searing the part, in order to stop the effusion of blood. The operation thus performed is tedious, painful, and not always attended with success, for as the principal artery contracts upon cutting the flesh, we have seen the part grilled for ten minutes with a red-hot poker, without closing the mouth of the artery, and the bird die in consequence of the loss of blood. If indeed the wing is amputated in the joint, 3. fig. VI. of the annexed plate, the effusion of blood may more readily be stopped by cauterization, but the very act of burning is excessively painful, retards a cure, and consequently is an unnecessary cruelty. It sometimes happens too that a large favourite bird may have a wing broken high up in joint, fig. 6, or in joint, fig. 7, in either case the wing may be taken off with safety by the simple means we shall describe, when by the coarse method, usually in practice, the life of the bird would scarcely be saved; it would either bleed to death, or die from the inflammation of a dreadful burn.

It is not our intention to give an anatomical description of the wing of a bird, or of the course and precise situation of the blood vessels: it is sufficient for the purpose to observe, that

that the principal arterial vessels lie underneath the bones, and not very distant from them, so that in the operation of applying a ligature in the manner hereafter directed, there will be no great danger in missing the principal artery.

The wing of a bird consists of five principal joints, with small auxiliary ones as represented in the annexed plate, fig. VI. and by a comparison with the human arm, or the fore leg of a quadruped, we shall find there is considerable similarity. The joints fig. 1, 2, and 4, answer to the *phalanges* of the fingers. Fig. 3. corresponds with the *metacarpus*, having two small bones attached to it, at fig. 5. 5. for the *carpus*. Fig. 6, consists of two bones, similar to those of the fore arm, the smaller is called the *ulna*, the larger the *radius*. Fig. 7 is the *os humerus*. From 1 and 2 of the *phalanges*, and from the *metacarpal* joint, fig. 3, arise the greater or primary quill feathers, usually consisting of ten or twelve. From the fore-arm fig. 6, springs the lesser or secondary quills, which cover the primaries when the wing is closed, consisting of twelve or fourteen feathers, according to the length of the wing.

The *os humerus*, fig. 7, bears what are called the tertials at the outer extremity, and at the other end is articulated into the *scapula*, and usually concealed by the scapular feathers. Fig. 4 is the *alula spuria*, from whence those feathers arise which constitute the spurious wing; this part answers to the thumb in the human hand, and in the Wild Swan, *Anas Cygnus (ferus)* is furnished with a corneous claw, as represented at Fig. 8.*

Supposing

* By comparative anatomy we also find a great similarity between the pedestrian joints of a bird, and that of the human species, or the hinder legs of a quadruped; but Ornithologists improperly term that part of the leg the *tibia*, which is in fact the foot, or tarsal joint. Man and some few quadrupeds rest the *tarsus* as well as the *metatarsus* on the ground in walking; but the greater part of quadrupeds and birds walk on the *phalanges* of the toes only. The *tibia* in birds is

Supposing that only eight or nine of the greater quills are wanted to be taken off, which is sufficient for the Duck tribe, the place for amputation is at fig. a. For short winged birds, such as the Pheasant and Partridge, the operation is best performed at fig. b, for these birds can rise a considerable way from the ground with the loss only of part of the primary quills.

In order to perform the operation at either of these places, the operator should be furnished with a long needle and coarse strong thread, which should be used double. Let the bird be held by an assistant, and having cut away the small feathers of the wing at the part intended to be amputated, pass the needle through between the two bones, as close as possible to the lesser bone, taking the inside of that bone for guiding the point of the needle. Return the needle on the opposite side of the great bone, a little within the skin, then bring the two ends together, and make a double turn in the first knot, to prevent slipping after tying, and draw the knot strongly, so as to form a ligature upon the vessels, and then tie a second knot. The intention of this is evidently to prevent the animal from bleeding to death, or from losing so much blood as to produce lingering disease. It will be obvious that by this ligature the larger bone, and the greater part of the flesh are enclosed, and as the main artery, or principal branch of the *brachealis* lies on the inside of that bone, amputation may now be performed with safety, and the ligature need never be removed. It now only requires

---

usually covered with feathers, but in some species is bare for a small space next to the *tarsal* joint. The *femoral* joint or proper thigh, the bone of which is articulated into the *acetabulum* of the *os innominatum* is wholly concealed by the feathers. The Penguin, the Auk, and the Guillemot, are the only birds that rest upon the *tarsal* joint.

The principal difference in the lower extremity of a bird consists in its having no *metatarsus*, the *phalanges* of the toes being articulated with the *tarsus*.

requires to place the wing on a block of wood, and with a sharp knife and a hammer to take the pinion off about the eighth of an inch below the ligature.

It will be readily perceived that a ligature tied round the two bones would not compress the main artery; besides by enclosing only a part of the limb, the ligature is not only secure from slipping, but the stump more readily heals.

If the wing of a bird is fractured by a shot as high up as the joint, fig. 7, the same operation may be performed with safety; by passing the needle and thread a little within the skin on each side the bone, just above the fractured part, and tie it as before described; then with a sharp knife cut the flesh round at the fracture; and if any splinter of the bone projects, it should be snipped off with a cutter or a pair of scissars as close as possible to the flesh. In all these cases the bird may be set at liberty, as soon as it is perceived that the ligature has been sufficiently tightened to prevent arterial fluxion, and never requires any further care.

When the amputation is performed, at fig. a, of joint 3, the *alula spuria* should be suffered to remain, as it gives a finish to the wing, and hides the stump.

CATALOGUE

OF

ADDITIONS and ALTERATIONS

TO BE MADE IN THE

ORIGINAL LIST OF BRITISH BIRDS;

Together with those species which are desiderata in the collection of the author, for any of which he will be obliged to his friends.

* Desiderata in the collection of the author.
† New species introduced into the British fauna.
The synonyms are printed in italics.

FALCON.	FALCO.
Golden Eagle	*Chrysaetos
Ringtail E.	*Fulvus
Spotted Falcon	*Versicolor
Honey Buzzard	*Apivorus
Henharrier	Cyaneus
Ringtail	*Pygargus*
Peregrine F.	Peregrinus
Lanner	*Lanarius*
Jer Falcon	*Islandicus
Grey F.	**Griseus*
Rough-legged F.	Lagopus
Booted F.	**Pennatus*
Merlin	Æsalon
Stone Falcon	*Lithofalco*
Goshawk	*Palumbarius
Gentil	**Gentilis*

OWL.	STRIX.
†Snowy Owl	*Nyctea
†Little Horned O.	*Scops
Tawny O.	Stridula
Brown O.	*Ulula*

WOODPECKER.		PICUS.
Greater Spotted W.	}	Major
Middle Spotted W.	}	*Medius*
PRATINCOLE.		GLAREOLA.
†Austrian P.		Austriaca
‡DIPPER.		AQUATILIS.
Common D.		Cinclus
THRUSH.		TURDUS.
†Solitary T.		Solitarius
FINCH.		FRINGILLA.
Greater Redpole	}	Cannabina
Brown Linnet	}	*Linota*
LARK.		ALAUDA.
Tit Lark	}	Pratensis
Pipit L.	}	*Trivialis*
HERON.		ARDEA.
Great White H.		*Alba
†Little White H.		Æquinoctialis
African H.		*Caspica
Gardenian H.		*Gardeni
Squacco H.		*Comata
†Freckled H.		*Lentigenosa
Crane		*Grus
White Stork		*Ciconia
Little Bittern		*Minuta
IBIS.		TANTALUS.
Glossy I.	}	Igneus
Green I.	}	*Viridis*
Bay I.	}	*Falcinellus*
SNIPE.		SCOLOPAX.
Red Godwit	}	Lapponica
Jadreka Snipe	}	*Limosa*
Cinereous G.		*Canescens
Greenshank	}	Glottis
Cambridge G.	}	*Cantabrigiensis*

‡ For the Water Ouzel, which has been buffeted about between *Turdus* and *Sturnus* we have made a distinct genus, as not properly belonging to either of these genera.

SANDPIPER.	TRINGA.
Grey-Sandpiper	Squatarola
Swiss S.	**Helvetica*
Green S.	Ochropus
Shore S.	*Littorea*
Long-legged S.	Grallatoris
Wood S.	*Glareola ?*
Spotted S.	*Macularia
Red S.	Islandica
Dusky S.	*Cattidris*
Aberdeen S.	*Aberdeeniensis*
Knot	*Canutus*
Ash-coloured S.	*Cinerea*
Brown S.	*Fusca
Black S.	*Lincolniensis
Purple S.	Nigricans
Schinger or Sea S.	*Maritima*
Little S.	Pusilla
Ruff	Pugnax
Greenwich S.	*Grenovicensis*
Yellow-legged S.	*Flavipes*
Equestrian S.	*Equestris ?*
Gambet	*Gambetta*
Red-legged S.	*Bewickii
Turnstone	Interpres
Hebridal S.	*Morinella*
Dunlin	Alpina
Purre	*Cinclus*
‡Pigmy S.	Pygmæus
PLOVER.	CHARADRIUS.
Ring Plover	Hiaticula
Alexandrine P.	*Alexandrinus*
Kentish P.	*Cantianus
COURSER.	CURSORIUS.
Cream-coloured C.	*Cursor
GALLINULE.	GALLINULA.
†Minute G.	Minuta
†Olivaceous G.	*Foljambii.

‡ This has been removed from Numenius, being more allied to Tringa.

PHALAROPE.	PHALAROPUS.
Red Phalarope	Hyperboreus
Brown Ph.	*Fuscus*
Grey Ph.	Lobatus
Plain Ph.	*Glacialis*
COOT.	FULICA.
Common C.	Atra
Greater C.	*Aterrima*
GREBE.	PODICEPS.
Little Grebe	Minor
Black-chin G.	*Hebridicus*
AUK.	ALCA.
Great A.	*Impennis
DIVER.	COLYMBUS.
Black-throated D.	*Arcticus
TERN.	STERNA.
†Gull-billed T.	Anglica
Common T.	Hirundo
Kamtschatkan T.	*Nœvia*
†Roseate T.	Dougallii
GULL.	LARUS.
Herring G.	Fuscus
Wagel G.	*Nœvius*
Black-headed G.	Ridibundus
Red-legged G.	*Cinerarius*
Brown-headed G.	*Erythropus*
Brown G.	*Obscurus*
Kittiwake G.	Rissa
Tarrock G.	*Tridactylus*
Common G.	Canus
Winter G.	*Hybernus*
†Little G.	*Minutus
Arctic G.	Parasiticus
Black-toed G.	**Crepidatus?*
MERGANSER.	MERGUS.
Smew	Albellus
Minute M.	*Minutus*

DUCK.		ANAS.
Red-Breasted Goose		*Ruficollis
Velvet D.		*Fusca
Scaup D.	}	Marila
White-fronted D.	}	
Blue-winged Shoveler	}	Clypeata
Red-breasted S.	}	*Rubens*
†Castaneous D.		Nyroca
Long-tailed D.		*Glacialis
Golden-eye D.	}	Clangula
Morillon	}	*Glaucion*
King D.		Spectabilis

‡CORVORANT.		GULOSUS.
Shag	}	Graculus
Crested S.	}	*Cristatus*

‡ It is proposed to separate the Corvorant from the genus Pelican.

Finis.

WOOLMER, PRINTER, EXETER.

ERRATA.

Bittern, and other parts, *for* aspira *read* aspera.
Ditto *for* branchi and branchial, *read* bronchiœ and bronchial.
Corvorant, *for* Pelicanus, *read* Pelecanus.
Curlew, *for* Tautalus, *read* Tantalus.
Curlew-pigmy, *for* Pigmea, *read* Pygmœa.
Eagle-cinereous, *for* Mr. Den, *read* Denne.
Falcon-perigrine, *read* peregrine.
Gannet, *for* celular, *read* cellular.
Grebe-black-chin, *for* Ornitholigical, *read* Ornithological.
Gull-common, line 7. *for* is pure white, *read* are pure white.
Heron-freckled, *for* castania, *read* castanea.
Ibis-glossy, *for* Commings, *read* Comyns.
Pheasant, *for* preventative, *read* preventive.
Ditto, *for* fascioli, *read* fasciolœ.
Plover-kentish, *for* we do not agree, *read* we do agree.
Pratincole, *for* Glariola, *read* Glareola.
Pope, *for* Puffen, *read* Puffin.
Sandpiper-little, line 23, *for* pucilla, *read* pusilla.
Siskin, *for* Aberdivine, *read* Aberdavine.
Thrush-solitary, *for* olin. uc. t. p. 114, *read* p. 14.
Wren-wood, *for* Lanbrolchen, *read* Laubvogelchen.

APPENDIX.

Dunlin, *for* Tringa cincla, *read* cinclus.
Duck-castaneous, *for* plate of trachœ, *read* tracheœ,
Falcon-grey, *for* Falco gresius, *read* griseus.
Falcon-stone, *for* Dendofalco, *read* Dendrofalco.
Phalarope-red, *for* Phalaropus fulicaria, *read* hyperboreus.
Pratincole and Sandpiper dusky, *for* Lin. Trans. vol. x. *read* xi.
Sandpiper-long-legged, *for* Tringa grallatoris, *read* grallatoria.
Definition of tracheœ, *for* branchiœ, *read* bronchiœ.

CATALOGUE.

Freckled Heron, *for* lentigenosa, *read* lentiginosa.
Dusky-Sandpiper, *for* callidris, *read* calidris.

Elements of Zoology.

SHORTLY WILL BE PUBLISHED,

ELEMENTS OF ZOOLOGY,

Being an Introduction to the study of animated Nature,

By WILLIAM ELFORD LEACH, M. D. F. L. S.

Fellow of the Royal College of Physicians and Wernerean Society of Edinburgh, and Royal College of Surgeons, London.